

Architect Colorado

FALL 2006
www.aiacolorado.org

2006 MAGGIE
AWARD-WINNING
PUBLICATION

McGraw Hill
CONSTRUCTION



AIA Colorado

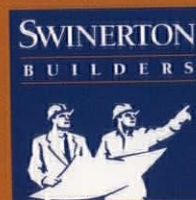
A Component of The American Institute of Architects

BUILDING GREEN
THE LEED PERSPECTIVE

DRAWING ON THE PAST TO BUILD THE FUTURE



WATERMARK - Luxury Residences (above)
Developer: Agatha Kessler, Watermark LLC
Architect: Fentress Bradburn



Doma Lofts (left)
Architect: Martinez+Cutri



www.swinerton.com
www.swinertongreen.com
Established 1888

SWINERTON BUILDERS
6890 West 52nd Avenue
Arvada, CO 80002

303.423.9242 phone
303.423.0632 fax

Jefferson County Workforce Building
3500 Illinois Street
Golden, CO 80401

Owner: Jefferson County
Architect: RNL
Engineer: Jirsa Hedrick & Associates
Contractor: Haselden Construction, LLC

Structural and Architectural Precast:

Rocky Mountain Prestress

Building Area: 120,000 SF

Building Frame: Total Precast

Erection Days: 44



100% Precast 100% Satisfaction



5801 Pecos St
Denver, CO 80221
www.rmpprestress.com
sales@rmpprestress.com
303-480-1111



ROCKY MOUNTAIN PRESTRESS

PCI Certified

Discover the Value...



Developer: The Nichols Partnership, Inc. • **Contractor:** M.A. Mortenson Company
Architect: David Owen Tryba Architects • **Location:** Denver, Colorado



Proudly Serving Colorado's
Finest Builders

(800) 824-7744

www.sierrapacificwindows.com



Architect Colorado

FALL 2006
Volume 2, Number 3

Features



12 > Responsible Design

Silverthorne Elementary is built to be versatile, maintainable and, ultimately, sustainable

18 > Community Empowerment

Residents turn the Merchants Row Brownstones into a model for urban infill

36 > Building at the Crossroads

Canyon Gate Plaza is the hip kid on a new, refreshing block

48 > Architects' Office Goes for Gold

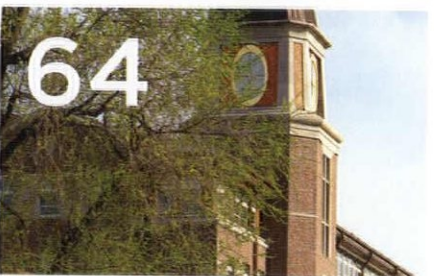
Boulder Associates creates an inspiring work environment, bringing sustainable concepts to life

56 > Altitude Adjustment

Aspen Recreation Center plays an integral role in the community's pursuit of an active lifestyle

64 > Design Matters

University of Denver's new law building earns first LEED-NC gold rating in Colorado



Departments

22 > The Business of Architecture

Mother Earth vs. the Almighty Dollar

40 > LEED: Digging Deeper

50 > A Recipe for Organic Living

62 > Marvin Hatami, FAIA, Guest Commentary

68 > On the Boards

RNL Design

Studio HT

72 > AIA Colorado News

Looking Ahead

Legislative Agenda

President's Letter

76 > Denouement

John Anderson, FAIA, on Environmental Responsibility

COVER Silverthorne Elementary School
Photo by Ed LaCasse

Maggie Awards WPA Winner

You are holding in your hand a 2006 Maggie award-winning publication. *Architect Colorado* was honored by the Western Publications Association with a first place Maggie award in April. Known as "the Oscars of the magazine industry," the Maggies are the most prestigious magazine publishing awards in the western United States, encompassing both consumer and trade publications in categories ranging from political issues to alternative lifestyles. Thank you to our staff, readers and contributors for helping to shine a light on the talent, leadership and work of Colorado architects.



PARKING FOR PEOPLE



Atlanta
Charlotte
Chicago
Dallas
Denver
Indianapolis
Kalamazoo
Philadelphia
Phoenix
Tampa

**Parking Structure Planning & Design
Studies & Operations Consulting
Restoration & Renovation Engineering**

**Contact: C. Melissa Horne
Business Development
(303) 894-8800**

WWW.CARLWALKER.COM

Architect Colorado

EDITOR

Jennifer Seward

SENIOR MANAGING EDITOR

Mark Shaw

PUBLISHER

Al Slattery

DESIGN

Douglas Ekstrand, PA, Ekstrand Creative, LLC

AIA EDITORIAL LIAISON

Heidi Gordon, Communications Director

ADVERTISING SALES

Phillip Kummer, phillip_kummer@mcgraw-hill.com

Joe Tuttle, joe_tuttle@mcgraw-hill.com

Michael Branigan, michael_branigan@mcgraw-hill.com

PRODUCTION MANAGER

Mike Reeder

ARCHITECT COLORADO Fall 2006, Vol 2, No 3

Published quarterly by the McGraw-Hill Companies, Inc.

POSTMASTER send address changes to the McGraw-Hill Companies, Architect Colorado, Attn: Circulation Manager, 1114 West 7th Ave., Suite 100, Denver, CO 80204.

PHOTOCOPY PERMISSIONS where necessary, permission is granted by copyright owner for those registered with Copyright Clearance Center (CCC), 222 Rosewood Drive, Danvers, MA 01923, www.copyright.com to photocopy any article herein for personal or internal reference use only for the flat fee of \$2.00 per copy for each article. Send payment to CCC. Copyright © 2006 The McGraw-Hill Companies, Inc.

The information contained within has been obtained by the McGraw-Hill Companies, Inc. from sources believed to be reliable. However, because of the possibility of human or mechanical error, the McGraw-Hill Companies, Inc. does not guarantee the accuracy or completeness of any information and is not responsible for any errors or omissions or for the results obtained from use of such information. The editor reserves the right to censor, revise, edit, reject, or cancel any material not meeting the standards of Architect Colorado. The information and opinions published in Architect Colorado represent the views of the authors and not those of the publication or AIA Colorado, unless otherwise stated. The acceptance of advertising does not reflect endorsement of products or services by this publication or AIA Colorado.

PRODUCED BY

McGraw-Hill Construction
1114 West 7th Ave., Suite 100
Denver, CO 80204-4432
303 584 6725
Fax 303 756 4465

AIA Colorado
1515 Arapahoe St., Suite 1-110
Denver, CO 80202
Phone 303 446 2266
www.aiacolorado.org

**McGraw Hill
CONSTRUCTION**

AIA Colorado



WE BUILD:

We build. It's what we do. For a quarter century, integrity, quality, and innovation have been at the core of every project. We would like to thank all our clients and design team professionals who have played an integral role in the building of our success.

Image:
Sky Ridge Medical Center,
Aspen Building

**25
YEARS**

**CALCON
CONSTRUCTORS**

www.calconcl.com



**Calcon Constructors | 2270 West Bates Avenue
Englewood, CO 80110 | 303 762 1554 ph | 303 762 1948 fax**

LETTERS TO THE EDITOR Architect Colorado will gladly accept all signed, dated letters to the editor. We reserve the right to edit for style and any potentially libelous content. Letters should be submitted at least a week before the published deadlines of the magazine and contain a maximum of 250 words. Send them to the attention of the editor at the email or address below.

PROJECT AND NON-PROJECT STORY IDEAS AND SUBMISSIONS Architect Colorado welcomes your story and project submissions. Just send a note describing your project, trend or issue story idea in 250 words or less on a CD. Include any photos (jpeg or tiff format) that may be appropriate and enclose a hard copy of your submission summary. You may also request a more detailed copy of our submission guidelines and story publication policy, or visit the AIA Colorado Web site at www.aiacolorado.org to view this information.

ON THE BOARDS SUBMISSIONS For projects that are unbuilt and/or under construction, please submit the following:

Project description (limit: 250 words); 1 rendering or elevation (jpeg 5 x 7 in size; 300 dpi resolution); Photo or rendering credit (individual and/or firm name); Project Location; Owner; Project Scope (size, in sq ft); Project Cost (if not confidential); Start Date (design & construction); Anticipated Completion Date.

HOW TO REACH US Send all letters, submissions and inquiries to: Jennifer Seward, Editor, *Architect Colorado*, 2661 Valentia St., Denver, CO 80238, or send email to jenseward@comcast.net

ARCHITECT COLORADO 2006 EDITORIAL CALENDAR

- > **WINTER ISSUE DEADLINES**
2006 Design Awards
The Faces of Architecture
Editorial: Sept. 29 Advertising: Oct. 6
- > **SPRING ISSUE DEADLINES**
Editorial: Jan. 12 Advertising: Jan 19

BOCA RATON . BOSTON . CHICAGO . NEW YORK . PALM BEACH . PHOENIX . SAN DIEGO . SAN FRANCISCO . TORONTO

ANY DOOR | ANY COLOR | ANY STYLE

ANYTHING.

irpinia
KITCHENS

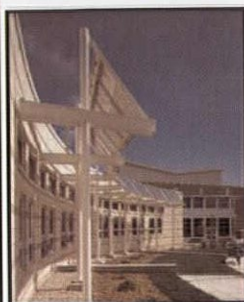


DENVER SHOWROOM | 250 STEELE STREET | CHERRY CREEK NORTH | WWW.IRPINIA.COM | 720.941.7006

EMC ENGINEERS, INC.

**Making Buildings Work.
Better.**

Celebrating 30 Years of Engineering Excellence
303-974-1200 303-974-1239



- High Performance Buildings**
- Commissioning
 - Retro-Commissioning
 - Sustainable Design
 - Energy Modeling & Assessments
 - LEED™ Consulting
 - Energy Savings Performance Contracts

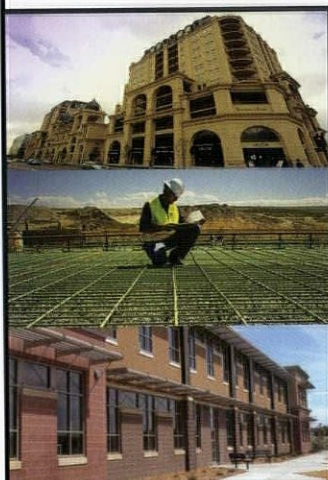


www.emcengineers.com

**Teaming with architects to successfully
complete projects for over 22 years!**

GROUND ENGINEERING CONSULTANTS

Over 22 years of experience providing Geotechnical Engineering and Construction Materials Testing to Commercial, Industrial and Governmental Clients in the Rocky Mountain Region



- Geotechnical Engineering
- Construction Materials Testing
- Materials Engineering
- Laboratory Services
- Static and Dynamic Pile Testing
- Pavement Engineering
- Steel Inspection & Weld Testing
- Environmental Assessment
- Failure Investigation
- Mobile Laboratories
- Retaining Wall Design
- Instrumentation & Seismic Studies

COMMERCE CITY • ENGLEWOOD • LOVELAND • GRANBY • GYPSUM
Phone: 303-289-1989 • Fax: 303-289-1686
Visit our website: www.groundeng.com

AIA Colorado

A Component of The American Institute of Architects

2006 AIA COLORADO BOARD OF DIRECTORS

PRESIDENT
Cheri Gerou, AIA

PRESIDENT-ELECT
Kin DuBois, AIA

TREASURER
Chris Stumm, AIA

TREASURER-ELECT
Stuart Coppedge, AIA

SECRETARY
Mary Morissette, AIA

PAST PRESIDENT
John Yonushewski, AIA

DENVER DIRECTOR
Brit Probst, AIA

NORTH DIRECTOR
Miguel Burbano de Lara, AIA

SOUTH DIRECTOR
Roger Sauerhagen, AIA

WEST DIRECTOR
David Argano, AIA

ASSOCIATE DIRECTOR
Deborah Faris, AIA

ASSOCIATE DIRECTOR-ELECT
Nilou Vakil, Assoc. AIA

PROFESSIONAL AFFILIATE DIRECTOR
Al Slattery, PA

PUBLIC DIRECTOR
Mark Gelernter, Assoc. AIA

STUDENT DIRECTOR
Sergey Chudin, SA

GOVERNMENT AFFAIRS DIRECTOR
Mike Wisneski, AIA

SDA LIAISON
Debra Ellis, SDA/C

EX-OFFICIO
Sonia Riggs

AIA COLORADO STAFF

EXECUTIVE DIRECTOR
Sonia Riggs

DIRECTOR OF LOCAL CHAPTERS
Melanie Sala

COMMUNICATIONS DIRECTOR
Heidi Gordon

PROGRAMS MANAGER
Jessica Cropper

ADMINISTRATIVE ASSISTANT
Emily Ewing

PART-TIME ADMINISTRATIVE ASSISTANT/BOOKKEEPER
Carmen Jaeger

THANK YOU 2006 AIA COLORADO CORPORATE SPONSORS

PLATINUM LEVEL Monroe & Newell Engineers Inc.

GOLD LEVEL INDOX Services; PCL Construction Services Inc.; and M.A. Mortenson Co.

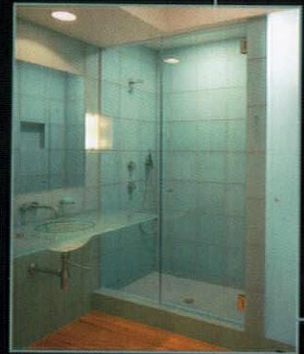
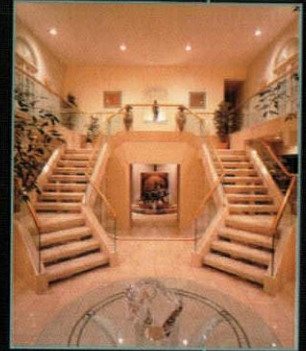
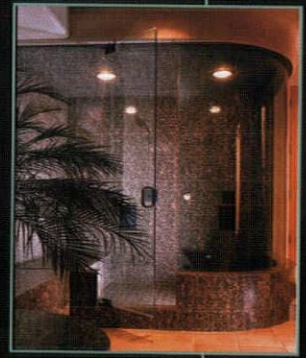
SILVER LEVEL Calcon Constructors Inc.; JVA Inc.; Rocky Mountain Prestress; and Saunders Construction Inc.

BRONZE LEVEL Cator, Ruma and Associates; Fransen Pittman General Contractors; The Gallegos Corp.; Haselden Construction; Pinkard Construction; S.A. Miro; Smith Seckman Reid Inc./Gordon Gumeson and Associates; and Turner Construction

ARCHITECT COLORADO, the award-winning primary outreach tool of AIA Colorado, is published quarterly to educate the public about architecture by AIA Colorado members and communicate industry trends, the value of quality design and the significance of working with an AIA architect.

Additional copies of *Architect Colorado* are available for \$7.50 per issue and can be obtained by contacting the AIA Colorado office at 303-446-2266. If you are interested in purchasing a large quantity of issues, contact AIA Colorado and ask about group sales.

THE AMERICAN INSTITUTE OF ARCHITECTS is the voice of the architectural profession dedicated to: serving its members, advancing their value and improving the quality of the built environment. Through a culture of innovation, The American Institute of Architects empowers its members and inspires the creation of a better-built environment.



*mirrors □ shower doors
tables □ railings □ shelving*

DGI DENVER
GLASS
INTERIORS, INC.

www.denverglassinteriors.com

South Showroom

1600 W. Evans, Unit A, Englewood, 303-744-0350

North Showroom

84th & I-25, Thornton, 303-531-5353

bulthaup



bulthaup b3: architecture for kitchens and living spaces.

In over fifty years, we haven't seen a more effortless marriage of form and function in modernist cabinetry, countertops, and integrated components. When we design with bulthaup, it isn't just another beautiful kitchen. It's luxury that works hard. It's engineering that touches the soul. It's sculpture you live in. Come in and get a taste of bulthaup architecture.

Kd.

Kitchen Distributors Inc.
bulthaup showroom
1038 Bannock Street
303.777.5409
kitchendistributors.com

Because Everything Begins in the Kitchen.

GREEN PARTY



FRED FUHRWEISTER, TIME FRAME

It's suddenly incredibly cool to be a tree-hugger. According to a recent *Newsweek* article, it has been 37 years since the first reference to the "greenhouse effect" in *The New York Times*, yet the magazine's cover "Green America: Why Environmentalism is Hot" pretty much says it all.

It seems everyone who's anyone is talking about Al Gore's new movie, and even retailing giant Wal-Mart — the supposed antithesis of environmental friendliness — has decided to help save the Earth (and the company's image), selling organic food, opening green supercenters and pledging to invest \$500 million in sustainability projects.

Even actor and architectural aficionado Brad Pitt has jumped on the green movement — joining with nonprofit group Global Green to build energy-efficient homes in devastated New Orleans — and Julia Roberts' newest role is as a spokesperson for Earth Biofuels, where she'll work with the alternative-energy company to get 500,000 school buses nationwide to switch to biodiesel fuel. So, it's official — the green building phenomenon has successfully made it into our pop culture. Unlike a lot of pop culture pieces, let's hope it's here to stay.

Here in Colorado, sustainability is nothing new, and certainly not a flash in the pan. In our featured business story, we take a close look at how architects are balancing the costs of building green with their profession's responsibility to the environment. Also in this issue, several design professionals weigh in on LEED, commenting on what's working well, what's not, and how to make it better.

Last fall, a team of 30 students from the University of Colorado's College of Architecture and Planning and the College of Engineering and Applied Science defended its championship title, bringing home another first-place award in the Solar Decathlon. Architect and Associate Professor Julee Herdt, Assoc. AIA, was the faculty adviser for the team, which designed and built a bio-based solar home with BioSIPs, a product she is developing and awaiting a patent on. "If you squeezed the house like a sponge, virtually no drops of petroleum would come out," says Herdt.

We're sure to learn more about these and other exciting new technologies at the Greenbuild International Conference and Expo taking place in Denver Nov. 15-17. Sponsored by the U.S. Green Building Council, Greenbuild is the premier green building conference in the nation, bringing the industry together under one roof for three days of extensive educational programming, workshops and a vast exhibition floor.

So, tree-hugging aside — I was never able to embrace their frumpy footwear — we're on the edge of a green future. I can't wait to see where the design community will take us from here.

Jennifer Seward
Jennifer Seward
Editor



Be inspired by the spirit of Tuscany

The Villa Collection is a contemporary interpretation of the rustic hardware found in 15th Century Tuscan Homes. Each piece is individually sand cast and finished by hand. Let Villa inspire you.



BALDWIN
ARCHETYPES

The Spirit of Place

See Archetypes at www.archetypes.com or this fine showroom:

H HUTTER WHOLESALE
hardware
designer kitchen and bath

www.hutterwholesale.com

815 South Jason Street | Denver, Colorado 80223 | 720.570.4488

Affreschi Series

Contemporary, Stained Concrete Look



Affreschi Ambra



Affreschi Moka



Affreschi Rubino



Affreschi Zaffiro



ARIZONA TILE

FEATURING THE SANTA FE COLLECTION

Combining clean and contemporary with a rustic element, the Affreschi Series offers the unique look of stained concrete. Yet as a glazed, porcelain tile it is ideal for commercial or residential use. Available in 13" x 13", 20" x 20" & 2" x 2" Mosaico.

10100 E. 45th Avenue | Denver, CO 80238
303.574.2990

www.arizonatile.com

ARIZONA CALIFORNIA COLORADO NEVADA NEW MEXICO TEXAS UTAH



RESPONSIBLE DESIGN

SILVERTHORNE ELEMENTARY IS BUILT TO
BE VERSATILE, MAINTAINABLE AND,
ULTIMATELY, SUSTAINABLE

- > PAGE 12
- > BY MELISSA BALDRIDGE
- > PHOTOS BY ED LACASSE



STEVE RIGGINS IS A PROUD PAPA. Not just of the 280 students he shepherds as principal of Silverthorne Elementary, but of the new school building he helped bring online in 2004.

The new building responds to its users and alpine environment in many ways. It also has luxe amenities like grand public spaces, expansive art and music rooms and a gymnasium worthy of private or higher-level educational buildings.

On the west end of Silverthorne, the building's palette mirrors that of the mountainous geology and botany outside. The canted canopy at the front entrance minimizes snowdrifts, and angled bunches of supporting columns suggest stands of aspen trees.

OZ Architecture, the architect-of-record, designed the building to last 50 years or more, with materials to handle the punishment that high-altitude UV light and 400 in. of annual snowfall can dish out. Skylights run along the roof ridge, flooding interior spaces with Colorado's plentiful daylight, and reflective elements like fixed-light shelves, angled ceilings and bookcase tops bounce daylight deep into classrooms. Even the "timeout" room is a glass and light-filled space that doubles as a copy-and-file room, although it's within uncomfortable eyeshot of Riggins' office.

To create a school that addresses current needs with enough flexibility for the future, Riggins and the Summit School District sought input from parents, teachers and an advisory board.

"When we opened, everyone was just thrilled," said OZ Project Architect Kelly Yamasaki, AIA.

Riggins agrees: "We just really designed our ultimate school."



PREVIOUS LEFT South entrance **PREVIOUS RIGHT** Entrance canopy **ABOVE** First-floor staircase and multi-use room **ABOVE RIGHT** South classrooms with light shelves

SILVERTHORNE ELEMENTARY SCHOOL

LOCATION Silverthorne, Colorado
CONSTRUCTION COST \$9.3 million
SCOPE 62,876 sq ft
PURPOSE To design a state-of-the-art, sustainable building that supports and reflects its community
COMPLETION 2004

OWNER Summit County Schools
ARCHITECTS OZ Architecture, architect-of-record;
 BOORA Architects, design architect
CIVIL ENGINEER Range West
STRUCTURAL ENGINEER Redwine Engineers Inc.
MECHANICAL/ELECTRICAL ENGINEER Beaudin Ganze
LANDSCAPE ARCHITECT DHM
GENERAL CONTRACTOR Adolfson and Peterson

OTHER NOTABLE PROJECTS BY OZ ARCHITECTURE

- > The Broadmoor Brownstones, Colorado Springs
- > Iron Flats Mixed-Use Development, Boulder
- > Founders Pointe and Fraser's Crossing, Winter Park
- > Rocky Mountain Chopra Spa and Wellness Center, Westminster
- > University of Colorado Visual Arts Complex, Boulder
 (to be completed 2009)

VERSATILE, MAINTAINABLE, SUSTAINABLE

A gift of 10 free acres as part of a larger development initially drove the project — that, and the poor condition of the old elementary school, which Riggins describes as small and inflexible. “Every time you turned around, something was an issue in making it a modern school,” he said. “In the old school, finding a teachers’ lounge was a compromise, and we moved it [the lounge] annually. One year, it was a lean-to in the media center. One year, we converted a storeroom.”

Designed by Texas architects in 1972, the old building even had air conditioning throughout, de rigueur in Texas of course, but not necessary at 8,900 ft above sea level except on rare high-summer days.

The school district selected OZ from 20 other firms, along with BOORA Architects Inc. of Portland, Ore., and handed down three charges: “Design a building that’s versatile, easily maintainable and sustainable,” which to the district meant long lived. The school district also wanted a building for their home in the Rockies that would be free of alpine clichés.

Yamasaki and team were well into design development, however, when plans for the 10-acre site fell through, sending the school district scrambling. An agreement was reached with the town of Silverthorne on an eight-acre site, part of Cottonwood Park, and the design team retooled the building.

RESPONSIBLE DESIGN

Funded by a voter-approved mill levy, the project budget of \$9.4 million was tight, so Rebuild Colorado, a grant program of the Governor’s Office of Energy Management and Conservation, supplemented OZ’s design fees for advanced modeling. The funds allowed the architects to follow the spirit if not the letter of U.S. Green Building Council LEED certification, and they planned energy and daylight energy savings in the building of up to \$40,000.

Heinz Rudolf, principal at BOORA, says that the design team took a Bauhaus view of the project — all systems working together holistically to create an energy-efficient space in a cost-effective way. “We looked at the building mass, built with heavier materials to retain the heat,” Rudolf said.



They used daylight studies for both classroom and multi-use areas, implementing skylights with automated louvers to maximize daylight in interior spaces.

The two-story building has a tight footprint, and all rooms are equipped with motion and daylight sensors, although teachers can manually override them. Windows sit lower in the walls to better capture winter sunlight, and even first-floor rooms have large light shafts to shower daylight into the back of the 1,000-sq-ft classrooms.

"We run all classrooms on six fluorescent lights," Riggins said.

A fully brick building would have lasted longer and been easier to maintain but would also have been more expensive to build, noted Yamasaki. So the designers used brick at the base, less vulnerable to destruction during snow removal than the cement board used higher up. They also used durable materials inside, including self-renewable, "tackable"

wood paneling, which looks fresh even after a year of pushpins, staples and sticky hands and fingers.

In fact, Riggins said that the most damage he's noticed isn't from the kids at all. "The biggest hazard is wicked slices from golfers across the street," he said, citing an errant golf ball that recently took out a skylight.

The architects also designed a number of multiple-use public spaces that can be cordoned off from the classrooms. The Girl Scouts, remedial math classes and church groups routinely use the public spaces after hours, which can also serve as a Red Cross center.

Even the new teachers' lounge is a far cry from the peripatetic one in the old building. It has a fully equipped stainless-steel kitchen, large tables and a generous seating area with large plate-glass views of the mountains.

"I love giving tours of the school," Riggins said. "This building is a recruitment tool." ♦

ONE VISION. ONE HUNDRED YEARS. ONE CHOICE



200 Fillmore Street, Denver, CO
Architect: 4240 Architecture, Inc.

After a century of building success, we've only just begun.



James Merrick State Parking Facility, Denver, CO
Architect: Carl Walker Inc./Shears Adkins



Byron G. Rogers U.S. Courthouse, Denver, CO
Architect: Bennett Wagner and Grody

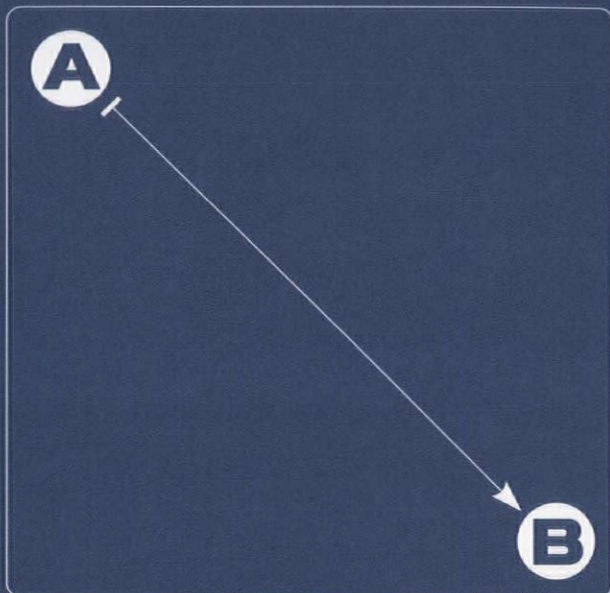
PCL Construction Services, Inc.
watch us build at www.pcl.com

efficiency*

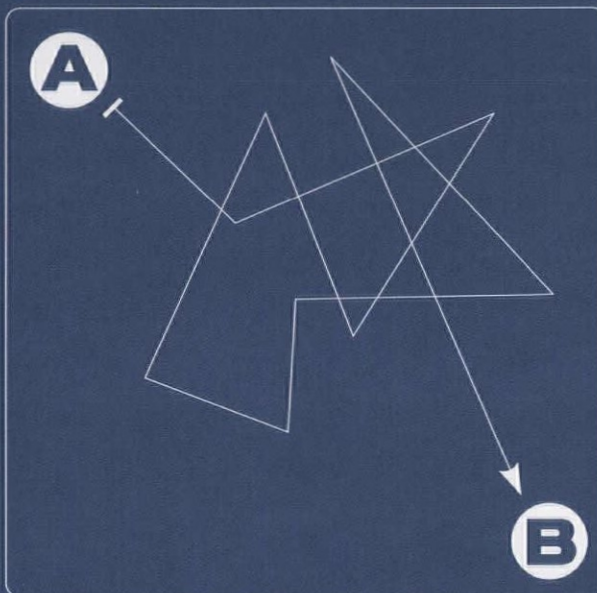
Efficiency \Ef*fi"cience\, Ef*fi"cién*cy\, n.
The production of the desired effects or results
with minimum waste of time, effort, or skill.

*[synonym: eBlueprint]

Reprographic Management & Distribution Diagram



The eBlueprint Abadan Way



The Other Way

eBlueprint Abadan is defining efficiency within the document services industry. Specializing in the reproduction of construction documents, they use an integrated on-line system to deliver cost and time savings to your business.

Services

- Printing of CAD drawings, specs, and other documents
- Web enabled uploading of orders and database of all drawings
- 24/7 on-line order tracking
- Local and overnight delivery with quick turn-around times
- eBidTools for managing bid invitations

To be more efficient call us today t 303.696.6363

eBlueprint[®]
A B A D A N
...plan on it



RESIDENTS TURN THE MERCHANTS ROW
BROWNSTONES INTO A MODEL
FOR URBAN INFILL

COMMUNITY EMPOWERMENT



A unique infill model has emerged in Denver's Curtis Park neighborhood.

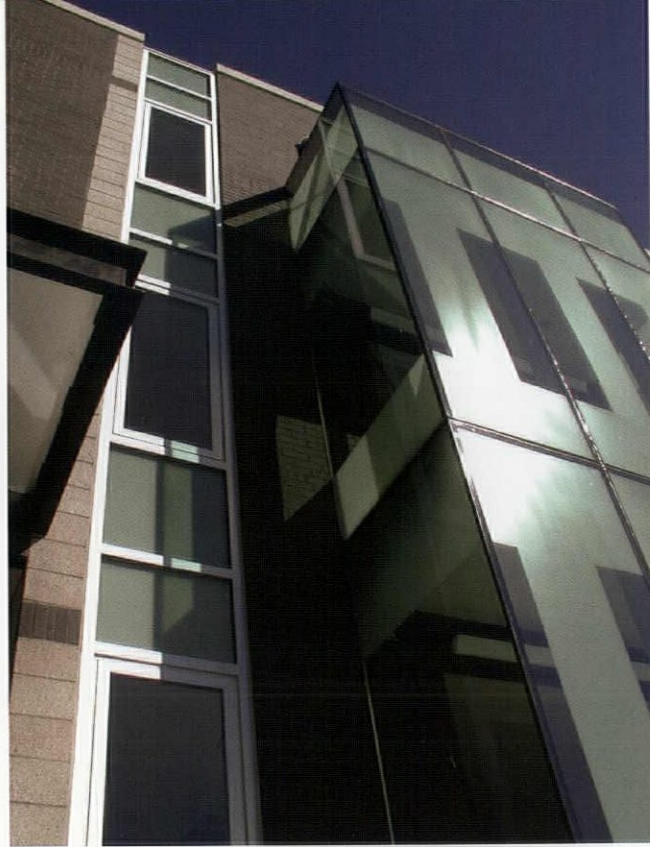
When residents learned of a plan to build an apartment complex on a small lot, they formed the Curtis Park Investors Group to purchase the land. This group of more than 40 residents set out to design and construct an infill project they felt to be more congruent with the scale and character of their neighborhood.

Cathy Bellem, a Curtis Park resident who has been managing the group's developments, went door to door asking residents to help beat the potential buyers to the closing table. The next morning she found \$40,000 in checks stuffed under her door. In a few short weeks more than \$150,000 was raised to close on the land.

"We were able to do this in part by forming an LLC [limited liability corporation] and selling shares," said Bellem. "We were able to keep the shares low to allow as many neighbors as possible to be involved. A share could be purchased for \$5,000."

Investors include an attorney, accountant, architect, city planner, historian, real estate broker and several members of the building trades. In acquiring the land, securing financing, selecting design professionals and ultimately constructing the project, the group has participated in what is essentially community building.

This model of community empowerment — from making difficult decisions about profit vs. density to working within a political system — has generated a sense of pride and accomplishment as participants have watched the structure take shape. The sense of community is enhanced by a common focus on this enterprise that was shaped with their own hands and ideas.



“We came together with the belief that there is an alternative to the speculative developer housing that has become so common in Denver’s transition neighborhoods.” — Cathy Bellem

HISTORIC DENVER NEIGHBORHOOD

A five-minute walk from Denver’s central business district, Curtis Park has survived the destructive claws of urban revitalization. It is one of Denver’s oldest neighborhoods, dating back to the great population boom of the late 19th Century.

“Curtis Park was built out by about 1885,” said long-time resident and historian Bill West. “The reason it survived was that the grid or ‘axis’ of the city changed once the Capitol building was built. Instead of coming out our way, development went the other way, and Curtis Park just survived, astonishingly, right on the edge of downtown Denver.”

“We have taken neighborhood activism to a new level with this project,” Bellem said. “We came together with the belief that there is an alternative to the speculative developer housing that has become so common in Denver’s transition neighborhoods. Long-time neighbors, some [who have lived here] for more than 30 years, put their own homes up for collateral to guarantee the construction loan.”

DESIGN THAT MATTERS

From the beginning, the group set out to develop a project whose value would not be tied to a particular property but would increase the value of the overall neighborhood. By rejecting the typical “get-in-and-get-out-quick” approach, they rallied around the notion that quality design matters.

“The architects held several design workshops with the group to build consensus on the design approach,” said Bellem. “We understood this was a true urban-infill project, and they were quick to steer us away from suburban gestures so typical of new construction near downtown.”

“Get a group of 40 neighbors together, and you’ve got a demanding client,” said Design Principal Joe Colistra, AIA, of in situ DESIGN, the project architect. “They take great pride in the neighborhood’s Victorian structures, but we understood that this should be a building of our time. We hope the contemporary design reflects the same spirit of optimism, quality, and attention to detail found

PREVIOUS RIGHT Rear stair tower
 PREVIOUS LEFT Champa Street exterior
 OPPOSITE LEFT Champa Street at night
 OPPOSITE RIGHT Glass bay
 BELOW Building information model

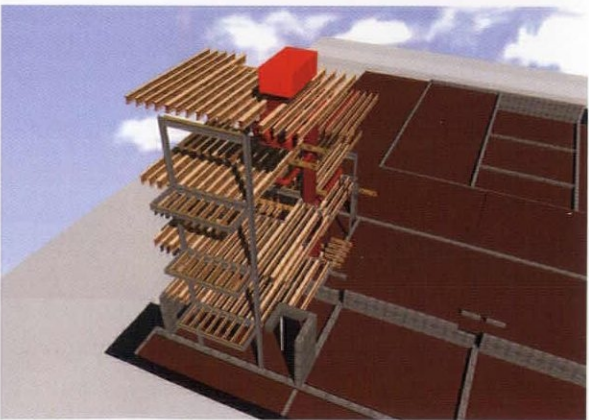
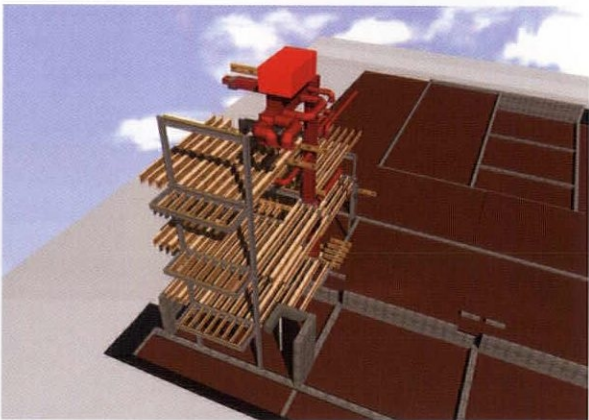
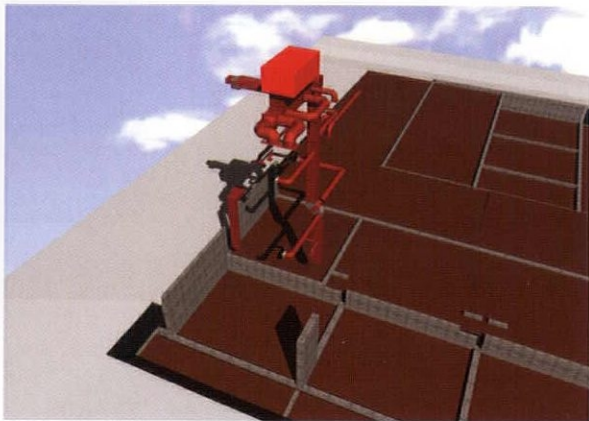
MERCHANTS ROW BROWNSTONES

LOCATION 26th and Champa, Denver
CONSTRUCTION COST \$2.5 million
SCOPE Six units ranging from 2,200 to 2,600 sq ft
COMPLETION July 2006

OWNER Curtis Park Investors Group II
DEVELOPMENT CONSULTING Grassroots Neighborhood Development
ARCHITECT in situ DESIGN
STRUCTURAL ENGINEER Studio NYL
CIVIL ENGINEER Creative Civil Solutions
MECHANICAL ENGINEER Integrated Mechanical Systems/Rogers & Sons Mechanical
ELECTRICAL ENGINEER Clayden and Associates Inc.
LIGHTING CONSULTANT Element Architectural Lighting Design
GENERAL CONTRACTOR Spectrum General Contractors
AMONG THE SUBCONTRACTORS/SUPPLIERS
 Trainor Glass, Rogers & Sons Mechanical, DC Plumbing, Sierra Glass, F&B Masonry, Berloni Cabinets (Progressive Design Group), Hayes Electric, T&G Flooring, Boyd Windows, Custom Windows, Boyd Roofing

OTHER NOTABLE PROJECTS BY IN SITU DESIGN

- > Champa Terrace, Denver
- > Lory Student Center Renovation, Colorado State University
- > The Gallantry Officers' Quarters Conversions,
 Former Lowry Air Force Base, Denver
- > Lawrence Street Rowhomes, Denver
- > YouthBiz Training Center, Denver



in the mansions that housed Curtis Park residents at the turn of the last century.”

Each unit includes a street-fronting entry porch framed by a glass canopy. The buildings have a distinct base, middle and top with a projecting bay. The bay is a three-story mullion-less curtain wall patterned in both frosted and clear glass.

“Located in a landmark district, we were very conscious of the fact that the project would have to undergo landmark commission review,” said Colistra. “We felt comfortable that the form, mass and scale met the guidelines. The three-story glass wall was a tougher sell. The pattern of frosted and clear glass matches the proportions of historic residential windows on the block, and we were able to get this approved by meeting the intent of a punched-window configuration.”

Bringing costs down in order to afford this glass system was not easy. in situ DESIGN used building information modeling to assist general contracting firm Spectrum in establishing a detailed cost model.

“We brought framing costs alone down almost a third by being able to walk them through a virtual framing model,” said Spectrum Project Manager Brion Doyle. “By showing the subs how systems were going to be coordinated in the computer, they reached a comfort level that there wouldn’t be surprises in the field. That confidence translated into lower bids.”

Contemporary interiors feature glass bridges spanning a three-story light shaft topped by a skylight, bamboo flooring, Richlite countertops, wet-style sinks and tubs, solid-core doors, stainless steel appliances and smooth-finish drywall throughout. The group is currently looking for another project to develop.



MOTHER EARTH

VS.

THE ALMIGHTY DOLLAR

HOW 'GREEN' DESIGNERS STRIKE A BALANCE BETWEEN SUSTAINABILITY AND PROJECT COST

> BY JENNIFER SEWARD

Daily list of "green" things to do:

- ✓ Shop at farmer's market to support local growers and eat organically.
- ✓ Learn how to xeriscape the lawn to save water.
- ✓ Test drive a slick new hybrid to replace the gas-guzzling SUV.
- ? Design with an eye toward energy efficiency and sustainability. Uh, sure...well, not really. Too expensive and doesn't make good business sense. Right?

Not so, say the experts.

Colorado architects who are making earth-friendly, common-sense choices in their designs concede that while factors such as cost and inconvenience have typically been stumbling blocks to sustainability, the profession is becoming better educated about how to make building green more financially realistic.

Today, it's impossible to have a discussion about the cost of sustainable design without the topic of LEED coming up.

"Data strongly indicate that [green building] doesn't have to be more expensive at all — especially for LEED and LEED silver."

— Amy Juron
USGBC Colorado

"The LEED process undeniably adds cost to a project because of the extra paperwork," said Paul Hutton, AIA, LEED AP, of Denver's Hutton Ford Architects. "But is constructing a LEED building really more expensive than a non-LEED building? It depends. If you're already designing a high-quality building, then the incremental cost is small. But if you're making short-term decisions, perhaps flipping the building, then no. That's why you see LEED in institutions. But in the private sector, it's more rare."



©2006 Trex Co., Inc.



Find inspiration for your deck everywhere.
Except other backyards.

BOISE™

Building Solutions
Engineered Wood Products

Denver 303.289.3271 800.525.1255
Grand Junction 970.244.8301

Imagine your perfect space. Trex can make it a reality with more preferred styles, colors and finishes – all backed by a 25-year warranty. And because Trex lasts longer and is easier to care for than wood, you can look forward to years of worry-free enjoyment. For help in designing the deck of your dreams, call 1-800-BUY-TREX, start now at mytrexdeck.com

Trex®
Create Your Space.®

Built by The Wood Master at Los Angeles County
Arboretum & Botanic Garden, David R. Kalb, AIA, Architecture


BUILT GREEN®
BUILT BETTER®



Fossil Ridge High School is the first LEED-certified school built for the Poudre Valley School District. However, this school district has been building schools with high-performance design since 2001. Courtesy of Haselden Construction.

CONTINUED FROM 22

Rare, perhaps, because of a long-standing — and, according to some, now outdated — belief that building green is expensive. Leading experts will tell you that this is no longer true, if you know how to make wise sustainable design choices. Others say that the costs associated with LEED certification are unavoidable, but that building green is the right thing to do and that architects must continue to set the course for smart design — even when owners are hesitant.

BALANCING COST AND CONSCIENCE

“Data strongly indicate that building green doesn’t have to be more expensive at all — especially for LEED and LEED silver,” said Amy Juron, executive director of the U.S. Green Building Council’s Colorado Chapter.

Introduced by the U.S. Department of Energy in 2000, the LEED (Leadership in Energy and Environmental Design) rating system is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings. LEED was created to define green building by establishing a common standard of measurement; promote integrated, whole-building design practices; recognize environmental leadership in the building industry; and transform the building market.

LEED certification aside, green building is not only the right thing to do, it’s also becoming an increasingly easier thing to do, said Fred Andreas, AIA, LEED AP, an adjunct assistant professor at the University of Colorado’s College of Architecture and Planning and principal architect with UNiT Design Studio PC.

So why are many owners and designers still balking at the cost of building green?

“That [argument] is so last century,” Andreas said. “Cost is not relevant any more. We should be more concerned with the costs of operating a building and the human resources costs. The idea is to make the atmosphere better for people.” →

High-performance design in Poudre Valley

According to Rebuild Colorado — an organization launched in 1997 by the Governor’s Office of Energy Management and Conservation to help Colorado building owners identify energy-saving opportunities and make those projects a reality — high-performance design brings a multitude of valuable cost savings to a building. Some of these include a more productive environment with less absenteeism and higher work performance, daylighting and natural ventilation, increased comfort because of more insulation, lower utility bills, less pollution generated and fewer toxic materials.

The Poudre Valley School District has become a role model for high-performance design, touting the most sustainable group of buildings in the state — and building them on conventional construction budgets.

“We are not a rich school district,” said Energy Manager Stu Reeve, part of the district’s integrated design team. “Poudre Valley is ranked 174 out of 178 school districts in Colorado; we compete for the dollars, and we get just one chance at this.”

The district spent time thinking about the design and picking apart even the seemingly smallest details to develop sustainable design guidelines, and it is currently the only school district pumping out high-performance design without pursuing LEED certifications.

“Bottom line, we are trying to build the best education facility possible,” said Reeve, “and these buildings are good examples of providing this while being economically responsible with taxpayer dollars.”

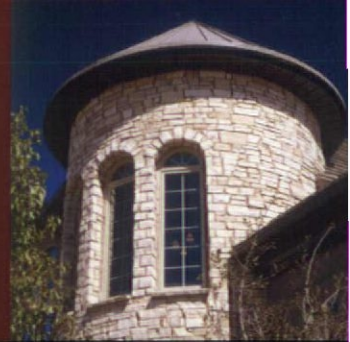
The Poudre Valley School District has been achieving high-performance design through an integrated design approach since 2001, with a grant from Rebuild Colorado to help fund its objectives. The district’s enviable outcome is attained by bringing professionals together from every imaginable aspect of the design process, from utilities to the Office of Energy Management and Conservation.

“It takes a nation to build a school,” joked Reeve, amending Hillary Clinton’s famous catch phrase. “You can talk sustainable design, but then you have to talk sustainable construction, and then sustainable maintenance over a period of time. We’re bringing all the pieces of the puzzle together to make our buildings better,” he said.

Reeve notes that building high-performance design for the Poudre School District initially cost 1 to 3 percent more due to the added meetings and consultants, “but it doesn’t have to cost more,” he said. “You can hit your standard budget. We spent more money in design on our first prototypical school, and future ones are benefiting from the cost savings.”

Reeve also notes that Fossil Ridge High School — the district’s first LEED-certified school, built in 2004 “to prove we are building LEED-quality schools” — came in under the conventional construction budget, proving that LEED didn’t make a difference in the cost. ♦

EXTRAORDINARY. ANY WAY YOU SLICE IT.



Natural rock cut thin. Exquisite brick cut thin.
Made beautiful by Robinson Brick Company.

800-477-9002 RobinsonBrick.com/AIA

**ROBINSON
BRICK
COMPANY**

SINCE 1880





The H+L Architecture-designed Frank H. Ricketson Jr. Law Building for the Sturm College of Law is the first LEED building on the DU campus, and currently the only LEED-NC gold-rated building in Colorado.

CONTINUED FROM 24

That sounds great in theory, but what about the price tag? OZ Architecture's principal David Schafer, AIA, LEED AP, project manager on the Boulder Community Hospital project, a LEED-silver building, said that the decision to pursue LEED certification was very much client driven, but that education is ultimately the key to making green building cost effective.

Even without an environmentally savvy client, "architects should know what they can do to make a difference without impacting the owner's costs," Schafer said. For instance, seemingly simple changes like choosing low-VOC paints are easy; they are now mainstream and no longer add cost to the project. "In my opinion, we should be doing this anyway; it's up to us to do the right thing," he said.

OZ's Paul Tremontozzi, AIA, principal-in-charge of the hospital project, agrees with Schafer, but concedes: "The general feeling is that building LEED is more expensive, due in part to the products and process...Certainly, it makes our life more complicated. →

LEED at DU

The University of Denver has experienced the benefits of building green. "We have been chasing energy efficiency since the early 1990s," said University Architect Mark Rodgers, AIA. "We have the lowest per square foot consumption of electricity and natural gas of over 58 institutions surveyed by an independent consultant, Sight Lines. We have chosen motors, pumps and heating and cooling systems based on long-term energy consumption rather than first-cost issues. Our heavy masonry and cast-in-place concrete building standard is an excellent thermal mass that well resists the often whimsical temperature fluctuations of the days here in Colorado. The use of the clay masonry was chosen for durability, but it is also a local material and therefore contributes to local resourcing of materials.

"Our signature copper roofs, while not white, are typically from over 90 percent-recycled sources, are 100 percent recyclable. We have always striven to provide an operable window to any room that folks will spend more than 45 minutes in at a time," he said.

The Frank H. Ricketson Jr. Law Building for the Sturm College of Law is the first LEED building on the DU campus, and currently the only LEED-NC gold-rated building in Colorado. Rodgers estimates that the costs on the Ricketson building were about 1 percent higher due to LEED certification-related expenses.

"We like to think that innovation does not have to appear exotic," he said. ♦

W.O. Danielson Construction Company, Ltd.



Whether new construction or restoration reconstruction, call us for your next project!

A Tradition of Excellence and Integrity

Serving the Denver, Boulder, Colorado Springs and neighboring Front Range Communities.

W.O. Danielson Construction Company, Ltd. Provides full Construction Management and General contracting services from inception to completion of your project. Our projects range from commercial, industrial, secular and institutional structures including banks, churches, recreation centers, schools, libraries and more. Our expert staff of construction managers, estimators, staff and superintendents partner with you to complete a quality, timely and cost-effective project.

303-788-1500

www.wodanielson.com

NEW WORLD

MILLWORKS

303/791-9003

www.newworldmill.com

ARCHITECTURAL WOODWORKERS

Existing

Photo-Rendering



ARCHITECTURAL RENDERINGS
VISUAL

Photo-Rendering

3D Images

Animations

Isometric Floor Plans

www.visualrenderings.com

7525 South Jasmine Court, Centennial, Colorado 80112
T. 303-957-3188 E. info@visualrenderings.com

Design by Coburn Development



Boulder Community Hospital is a LEED-silver building designed by OZ Architecture.

CONTINUED FROM 26

I think [LEED] is a beneficial program and we are all learning from it," he said, but adds that it isn't as simple or as low cost as some proponents tout.

In addition, he asserts that some of the materials being used to gain LEED points are not well tested and may not have enough longevity behind them. "Not all are holding up. For instance, there have been lots of call-back issues on the basics of carpet and floor tile, and the adhesives related to those things," Tremontozzi said.

"There are a lot of things you can get LEED credit for that are being done in typical buildings anyway, to meet regular energy codes. You get points for that," he added. "But to make the various levels of LEED certification, you have to go beyond those energy codes. There's always the conflict of approaches and codes. We had a really high groundwater table at the hospital. We looked at all kinds of opportunities to use that groundwater for irrigation, fountains or in various other ways. Ultimately, we couldn't do it because of Colorado state water rights. So even

CORE Grants

Aspen's Community Office for Resource Efficiency (CORE) promotes renewable energy, energy efficiency and green-building techniques in western Colorado's Roaring Fork Valley. Innovative programs implemented by CORE in conjunction with local governments and utilities will keep 1 billion lbs of greenhouse gases out of the atmosphere in coming years. A \$250,000 CORE grant has helped defray the costs Hutton Ford incurred in pursuing LEED certification on its Aspen Middle School project.

"We were already committed to a high-performance building," said firm principal Paul Hutton, AIA, LEED AP. And with just 1 percent of the project's budget going toward LEED, the CORE grant covered the added expense.

"We're using LEED as a way to bolster Aspen, [to give it] green legitimacy," said CORE Associate Director Gary Goodson. "This [middle school] is a public building with a long life. What better investment could you make than building a green school?" ♦

your needs. our services. a perfect match.

With more than 100 services and 750 industry experts, we match you with the right people and solutions – delivering a quality product you expect and deserve.

Call SEH today!

800.490.4966 | www.sehinc.com

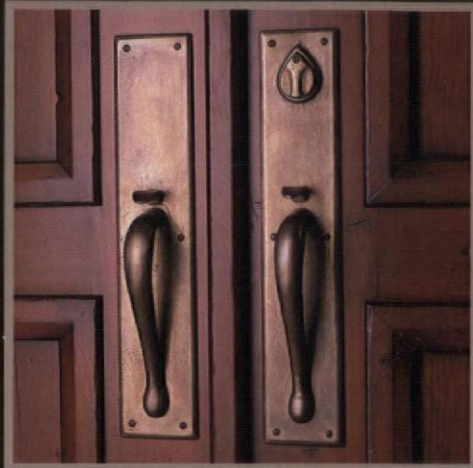
concentration!

[ARCHITECTS | ENGINEERS | PLANNERS | SCIENTISTS]



SUN VALLEY BRONZE

Innovators of Fine Solid Bronze Architectural Hardware



Available through:

Custom Door Hardware

970.285.1177 phone www.customdoorhardware.com 970.285.1178 fax



CONTINUED FROM 28

with all this water running through the site, there were other factors in play.”

COMMON SENSE APPROACH

Andreas argues that building sustainable projects “boils down to good, smart design.” Common-sense approaches like orienting buildings to the sun and the south to minimize the hot western exposure, utilizing natural daylighting concepts and passive solar cooling, as well as other natural processes, can substantially downsize a building’s HVAC and lighting systems, cutting the energy usage in half.

“Climatic design is a very simple concept that can

make a building cost less than a standard one... I really believe that if you minimize the energy-cost payback, the initial cost [of LEED certification] can become lower than standard construction,” Andreas said.

Hutton emphasizes that sustainability doesn’t add to a project’s costs at the most basic levels. “[Hutton Ford Principal Alan Ford, AIA] and I don’t do any buildings that don’t have at least some aspect of sustainability,” he noted.

On an office building Hutton Ford recently designed at Lowry, “we got a number of things in under the base budget to make it a sustainable

Colorado has an executive order requiring all new state buildings to be built LEED- silver, if it is cost effective. The Colorado Department of Labor and Employment, designed by David Owen Tryba Architects and completed last fall, is the state’s first LEED-certified building. There was no additional cost associated with the LEED portion of the project.

WHICH WAY

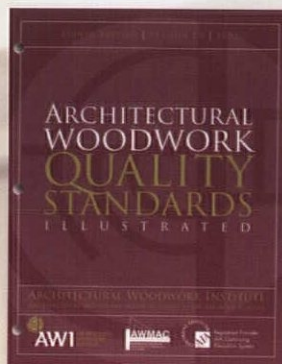
ekstrandcreative.com



AWI

Colorado Chapter
ARCHITECTURAL
WOODWORK
INSTITUTE

**COLORADO
CHAPTER**



AWI Quality Standards
New 8th Edition now available!

QUALITY WOODWORKING SOLUTIONS FOR COLORADO

CONSULT A WOODWORKING PROFESSIONAL ON YOUR NEXT PROJECT

BKFine Woodwork
Cab-Con Enterprises
Concepts in Milwork
E&J Cabinets
General Casework Inc
Gold Plane Custom Cabinets
Heartwood Custom Woodworks
High Country Millwork
J&M Custom Cabinet Shop
New World Millworks, Inc.
Precision Interiors Inc.
Unique Woodworking
Wood Creek Custom Cabinetry

Bruce King
Mike Perdue
Scott Robinson
John Peterson
Steve Johnson
Loren Anderson
Janet Jordan
Michael Childs
Julio C. Estrada
Eric Peterson
Tony Slavec
Phil Lantz
Raymond Broome

(303) 507-5273
(719) 382-5649
(719) 570-7353
(303) 425-7527
(303) 373-2106
(303) 451-5318
(970) 328-1074
(303) 532-2222
(303) 853-9767
(303) 791-9003
(303) 761-7673
(303) 573-3966
(303) 828-5118

Member company information now available on www.awi-colorado.com

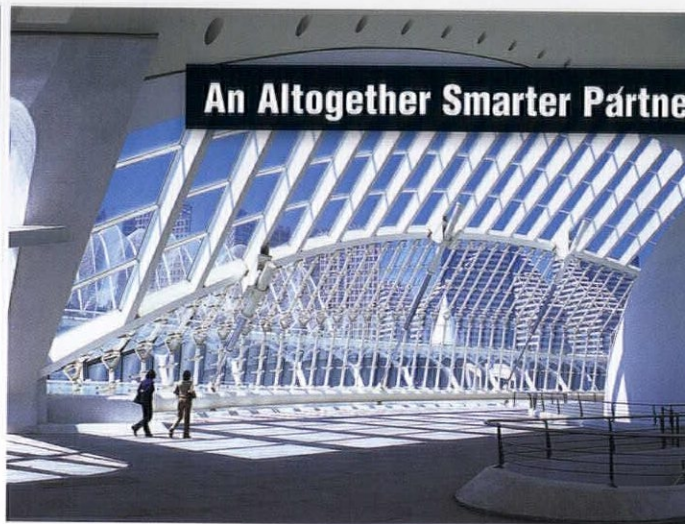
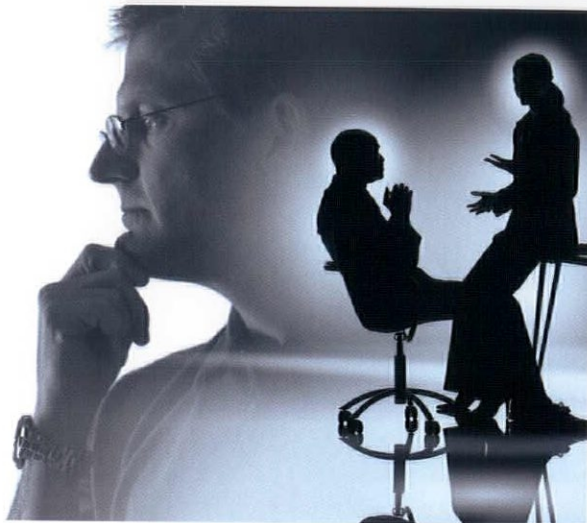
Company information on each member available on AWI website

www.awinet.org click on "Find a Woodworker"

Architects receive Quality Standards book free with all affiliate membership!



What if you could fully automate drawing and schedule production through a single, integrated building information model?



Gain a competitive edge—choose the best technology and professional services partner.

Avatech's industry experts leverage Autodesk technology and their implementation expertise to ensure that their clients can effectively:

- Make design changes anywhere, anytime – coordinated everywhere.
- Provide customers more design-enhanced documentation on shorter schedules for the same fee.
- Increase customer confidence and maximize profitability.
- Eliminate errors that cost time, money, and affect their reputation.

What can our real-world expertise do for you?

Call 800-706-1000, visit avatech.com/web/bsd, or email bsdinfo@avatech.com.



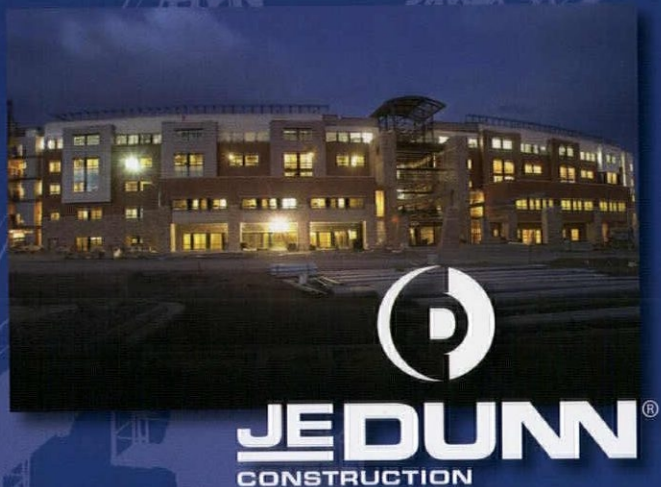
Autodesk
Authorized Training Center



AVATECH
SOLUTIONS®

Altogether Smarter Design.

Think Green. Build Blue.



Our commitment toward sustainability and green building at JE Dunn helps provide tangible and intangible cost savings across the board. We have completed over \$500 million of LEED™ certified projects and projects built with green building practices. The Medical Center of the Rockies is a shining example of our green pursuit, with over 70% of construction waste being diverted from local landfills. Pursuing LEED™ Silver Certification, Medical Center of the Rockies will be the second Silver Certified hospital in the State of Colorado. To find out more about our green building practices, visit www.jedunn.com.

JE Dunn Construction
Denver (303) 753-8988
Colorado Springs (719) 471-0217
www.jedunn.com

“The burden is still on us; we have to take the initiative.”

— Paul Hutton, AIA, LEED AP
Hutton Ford Architects

CONTINUED FROM 32

owners are interested in doing the right thing,” said Hammel. “Most are municipal projects, and most want to get on the bandwagon without spending money to get on the bandwagon. Even if they aren’t pursuing certification, they are asking us to follow the LEED guidelines and do all the right things...Folks have limited budgets and want to get the most bang for their buck.

“The good thing about LEED certification,” Hammel said, “is that it forces you to prove it. You can have all the best intentions, but if you can’t prove [through commissioning] the systems are operating properly, then you missed the point.” ♦

Resources

The Governor’s Office of Energy Management & Conservation’s Rebuild Colorado program offers a High-Performance Design Toolkit to help build better buildings. The toolkit includes:

Free Online Resources

- > Using LEED-NC in Colorado: Tips, Resources and Examples (100+ pages)
- > Case studies of Colorado projects
- > RFQs and other sample documents
- > Cost Effectiveness of LEED-NC in Colorado (research now under way).

Education

- > Full-day high-performance design training sessions around the state. The next sessions are being planned for Durango and Montrose in October 2006.
- > “Making the Case for Green Building” seminars beginning in fall 2006.

Technical Services

- > Presentations to decision-makers
- > Telephone support and referrals

More information at www.colorado.gov/rebuildco. ♦

Idea:
Quickly replace devastation
with development.

Autodesk®

Realized:

When India-based design group Inspiration set out to help rebuild the vast tsunami-ravaged coastal districts of Tamil Nadu, they had to do it fast. Employing local building materials such as bamboo and using Autodesk® Revit® Building software — Inspiration designed building information models and enabled the construction of 150 homes and civic structures, efficiently and sustainably. Through their work, they offered thousands of people more than relief, they offered hope.



Call CAD-1 today to register for one of our free workshops or to receive a free trial of Autodesk Revit Building.

CAD-1
12130 N. Pennsylvania St., Suite 101
Thornton, CO 80241
www.cad-1.com info@cad-1.com
Phone: 303.427.2231 Fax: 303.428.9720

Imagery acquired by Digital Globe. Autodesk and Revit are registered trademarks of Autodesk, Inc., in the USA and/or other countries. Autodesk reserves the right to alter product offerings and specifications at any time without notice, and is not responsible for typographical or graphical errors that may appear in this document. © 2006 Autodesk, Inc. All rights reserved.

BUILDING AT CANYON GATE PLAZA IS THE HIP KID ON A NEW, REFRESHING BLOCK THE CROSSROADS

THE VIEW WAS BLEAK. Across Boulder's 28th Street, the dying Crossroads Mall took its last retail breath and closed its doors after 25 years. Commercial demand was declining, and the city of Boulder wasn't optimistic about a short-term market rebound. Needless to say, investing significant redevelopment dollars at the corner of Canyon and 28th was a decidedly bold risk for anyone to take.

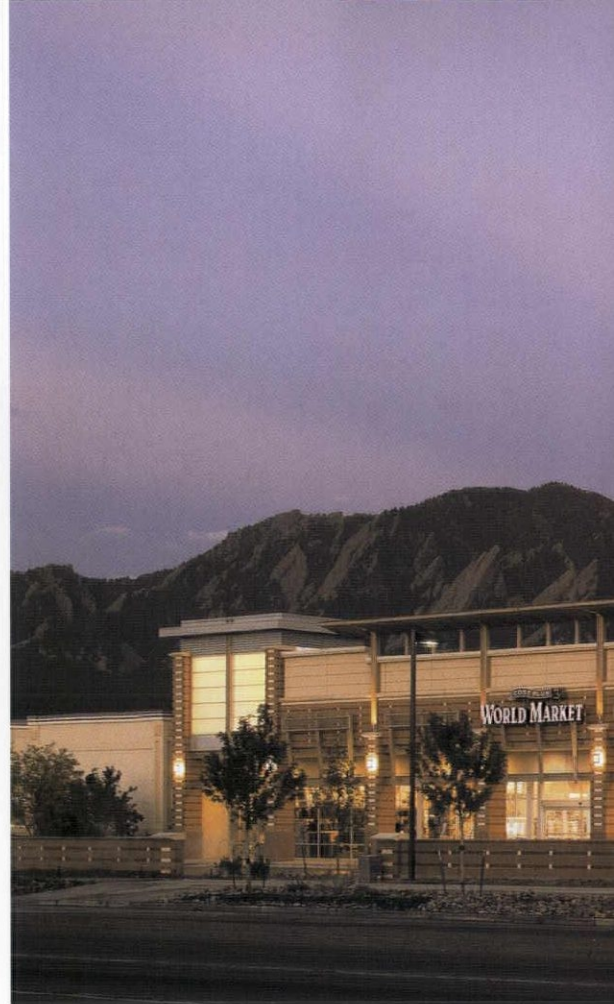
For Lou DellaCava and Steven Tebo of DellaCava Tebo Development, the risk was negated by their intrinsic faith in the project. They moved forward with their vision to redevelop the site, which, at the time, was home to a 1960's-era warehouse-type retail building and two tired pad sites.

"Even though Crossroads Mall was now dismal, defunct and awaiting an undefined future," said DellaCava, "we wanted the new building to demonstrate strength, as well as an optimism and confidence in the future of Boulder."

While the existing buildings were drab and dated, they were fully leased and generated about \$350,000 a year in net revenues. Shutting down this revenue stream for a few years during construction added to the inherent risks involved. This was plenty of motivation for the developers to move quickly and limit their losses during the redevelopment phase.







Although city planners urged the development team to consider a three- or four-story building with mixed residential, commercial and underground parking, the team elected a more conservative approach — a two-story retail and office building with partial underground parking. Additionally, they opted to incorporate one of the existing buildings into the new structure. Recycling the 17,500-sq-ft building resulted in a savings of more than \$2 million in demolition and reconstruction costs.

IT'S A WRAP

The new Canyon Gate Plaza was designed by architects Erik Hartronft, AIA, and Bill Fauri, AIA, before joining their practice with Boulder's DTJ Design. According to Hartronft, it took many meetings with the owner, city planning, and the Urban Renewal Authority to arrive at an acceptable design direction so all the parties could comfortably move forward.

"The lesson here," said Hartronft, "is one we are constantly reminded of during any public approval process — that our role as advocate for both the client and the community puts us in the position of mediator through the designs we propose."

Incorporating the existing building was a design challenge. The existing building needed to be wrapped by the new construction.

"The parking garage had to work around the existing foundation, the office space cantilevered partially over the existing roof, and a new façade and arcade enveloped this otherwise unremarkable structure," explained Hartronft. "Structurally, the old building became fused with the new construction, causing many challenges during design and construction. For the overall project, it was worth the trouble, but we were reminded never to underestimate the potential for an existing building to throw you a curve ball."

From the exterior and interior, no one can tell that the one building is actually a mix of old and new. According to Della-Cava, it was important that Canyon Gate Plaza's design felt modern but timeless. "We believed we were taking daring risks with the costs of the project in selecting high-design curved metal surfaces, multi-colored and glazed masonry, large expanses of high-efficiency custom shaped glass, and multiple radiuses in our elevations," he said. "The result in our opinion was a very 'pretty' expression of a rugged, strong-shouldered and dignified structure."

BEACON OF HOPE

Unlike typical "strip retail," the detail and articulation of Canyon Gate offers a pedestrian experience. This, combined



with a covered arcade, draws people into the storefronts and away from the busy street. A strong marketing effort to pre-lease space proved to be successful. The first floor was leased immediately with national tenants, including World Market and Einstein Bagels. Within a year, the second floor office space was leased. This was a great achievement, considering that Canyon Gate Plaza was in a market with a high office vacancy rate.

"The best compliment to an architect doing a speculative commercial building is to see it leased up and alive with activity," said Hartronft.

The building that once stood as a kind of "beacon of hope," in a failing part of the city, will soon be surrounded by a vibrant retail destination district. With the new 29th Street development replacing the old Crossroads Mall across the street, the entire area will once again be an essential part of Boulder's economy and vitality.

As the "old kid" on a new block, the building architecture is still fresh and distinctive. With timeless materials — and devoid of the usual attention-grabbing retail colors, banners and other devices — it is a dignified addition to the streetscape and a welcoming gateway into Boulder.

"It's gratifying to see how well the architecture works with the new context of the adjacent 29th Street development, even though Canyon Gate was completed before that design was initiated," said Hartronft. "It all feels very appropriate from an urban design standpoint. It's wonderful when truly great clients like Lou and Steven are ultimately as concerned about the community as they are about their own goals. It all came together on this project."



PREVIOUS Covered arcades draw pedestrians in and away from the street. **OPPOSITE** The details set the building apart from others nearby, especially through the use of large expanses of high-efficiency, custom-shaped glass. **ABOVE** With timeless materials — and devoid of the usual retail attention-grabbing colors, banners and other devices — Canyon Gate Plaza is a welcoming gateway into the city of Boulder.

CANYON GATE PLAZA

LOCATION Boulder

CONSTRUCTION COST Not disclosed

SCOPE Retail - 29,000 sq ft; Office space - 16,000 sq ft; with underground parking

PURPOSE To redevelop the site into a higher-density, mixed-use building as a gateway to the city

COMPLETION DATE 2003

DEVELOPER DellaCava Tebo Development

ARCHITECT Hartronft Fauri Architects (now with DTJ Design)

STRUCTURAL ENGINEER Nicol Associates

CONTRACTOR Golden Triangle Construction

OTHER NOTABLE PROJECTS BY DTJ DESIGN

- > ATLAS at the University of Colorado at Boulder
- > One Boulder Plaza, Boulder
- > Louisville Police Department and Municipal Building, Louisville
- > Haciendas at Desert Mountain, Scottsdale, Ariz.
- > Bellerive Mixed-Use Development, Couer D'Alene, Idaho

LEED: DIGGING DEEPER

ARCHITECT COLORADO ASKED FOUR LOCAL DESIGN PROFESSIONALS TO WEIGH IN ON LEED. HERE THEY TALK ABOUT WHAT'S WORKING, WHAT'S NOT, AND SUGGEST WAYS TO MAKE IT STRONGER.

LEED and the Aspen Middle School: Lessons Learned

> BY KERRIE KANNBERG, LEED AP AND PAUL HUTTON, AIA, LEED AP



While pursuing a LEED-silver rating for our Aspen Middle School project here at Hutton Ford Architects, we have come up against some peculiarities of the system. They involve daylighting, public transportation and the urban heat-island effect. Based on this experience, we would advocate revising LEED to better accommodate the needs of particular climates and communities.

DAYLIGHTING (LEED CREDIT IEQ 8.1)

The Aspen Middle School will be as well daylighted as any middle school building in the state. It includes extensive windows, clerestories and tubular skylights for daylighting as well as providing views of the spectacular surroundings. Yet, this fine example of daylighting will not earn the LEED credit for daylighting because it does not have the 2 percent minimum "daylight factor."

Daylight factor is a complex technical term, but in essence it measures the interior light level as a percentage of the simultaneous exterior light level.

In a predominantly sunny, high-altitude and dry climate such as Colorado's, two percent is simply too high. It is not uncommon for us to have exterior light levels in excess of 5,000 ft-candles. 2 percent of that is 100 ft-candles of interior illumination, which is nearly three times our design level of 35 ft-candles for classrooms. →

The Riddle of LEED or Have You Heard the One About Engineers and Architects?

> BY FRED ANDREAS, AIA, LEED AP



As engineers go through school, they learn a whole bunch about a few specific subjects. As specialists, they progress through their careers learning more and more about less and less until they finally know everything about nothing.

Architects, on the other hand, go through school learning a little bit about absolutely everything. As generalists, they go through their careers learning less and less about more and more until they know absolutely nothing about everything.

So there you have it. That's why we seldom speak to each other unless spoken to. Keep those differences in mind; I'll explain later why they're important to our discussion about the future of the U.S. Green Building Council's Leadership in Energy and Environmental Design program. →

HOW TO DESIGN SUCCESS

Architect/Engineer E&O Defense

Occupational Safety & Health

Owner-Architect Contracts

Labor & Employment

Environmental Law

Litigation

Business & Commercial Transactions



Phillip B. Cardi
Administrative Manager
Denver, CO
(303) 390-0003



Hutton Ford Architects received a CORE grant to cover the 1 percent of additional costs associated with LEED certification on the Aspen Middle School.

> KANNBERG AND HUTTON CONTINUED FROM 40

If we were to provide a building with a 2 percent daylight factor, we would have spaces that are often glaringly bright and prone to overheating. LEED should be revised to define different daylight factors for different climate zones, similar to seismic zones for structural engineering.

TRANSPORTATION (LEED CREDIT SS 4.1),

This transit credit requires the project site to be close to two public bus lines. In a small town such as Aspen, there are fewer bus lines than there are in large cities. The one bus line that serves the school campus is well connected to the town and frequently used by students and staff. Further compounding the ineffectiveness of this LEED credit is the fact that school buses are discounted. The school district makes a substantial investment in operating and maintaining a bus fleet, with the purpose of reducing car traffic, yet LEED ignores them.

LEED should be modified to require only two transit lines in towns with a certain population, and school buses should be eligible to support this credit. This would remove the urban prejudice built into this LEED credit and better accommodate school districts.

URBAN HEAT ISLAND EFFECT (LEED CREDIT SS 7.2)

This credit requires roofing to be reflective rather than light absorbing. While we routinely use reflective membranes along the

> ANDREAS CONTINUED FROM 40

NEW ISMS

LEED has changed the way we work. Yes, it has helped us define green buildings and environmentally sound projects, but that may be more a result than the point. The bigger picture reveals a broadening of our perspective. Our collective conversation has shifted over the past several years to where now when you bring up the subject of high-performance, green projects, that doesn't send the clients and the banks scrambling for the door.

The advent of green into the mainstream opens the door to a new "-ism"—integrated design. As a new -ism, it remains vulnerable to the foibles of other design fads, except for one main point. This new direction includes a complete shift in our way of doing business. As such, it may stick around for a while, unlike the last 10 -isms of the 20th Century.

TRUE INTEGRATION

LEED mandates, even requires, the integration of design professionals and constituents at the earliest possible point in the process! Now architects, engineers, owners, contractors, CMs, CAs, even public officials must engage in conversations from day one! Is that possible?

LEED makes it necessary. What...no dead ends or detours. Well, let's not get carried away. Maximizing communication becomes the point, not a sidebar. So, what's the advantage of LEED? First:

Front Range, our roofing consultant advised against a reflective membrane in Aspen. His goal was to maximize snow melt and rid the roof of moisture as quickly as possible.

A reflective roof would have a shorter life and be more leak prone in the Aspen climate. Because of Aspen's more severe winters and milder summers, the reflective membrane would have had little positive effect on annual energy use. LEED should be modified to allow nonreflective roofs in colder climates and areas outside dense metropolitan cores.

In spite of these frustrations, the design team for the Aspen Middle School has enthusiastically adopted the LEED methodology and process. With support from the Aspen School District, the Community Office of Resource Efficiency and the town of Aspen, LEED-silver certification remains our goal. ♦

Kerrie Kannberg, LEED AP, is a member of the U.S. Green Building Council and is on the Building Colorado Coalition's Steering Committee, where she is working to help pass the 2005 Greening of State Government Executive Order and the 2006 Green Building Resolution. Kannberg is working as the LEED Coordinator on the Aspen Middle School Project for Hutton Ford Architects.

Paul Hutton, AIA, LEED AP, is a principal at Hutton Ford Architects in Denver's Golden Triangle. The firm focuses on environments for learning, in addition to office, retail and residential work. All of the firm's work is sustainable and daylighted. Hutton's sustainable design track record dates back to the 1970s when he built solar houses. Hutton is an honorarium instructor at the University of Colorado at Denver graduate School of Architecture, where he teaches "Fundamentals of Daylighting."

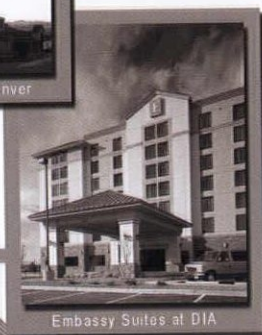
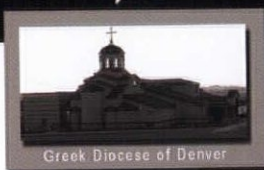
raising social responsibility awareness to a more ubiquitous appeal, changing the national conversation to a new level. Second: demanding an integrated process from beginning to end.

Of course, issues remain. LEED, not accepted by AIA National (they prefer high-performance standards), is increasingly part of the Colorado conversation. The governor's office, the legislature, the city, AIA Colorado all recently mandated and supported green initiatives. Most firms now have LEED APs on staff. Registered LEED projects increased tenfold over the past several years in our state. To make LEED more universal, we as architects must demand a greater emphasis on high design in the LEED process.

In the past, some LEED projects have qualified on the merits of their engineering solutions, creating shoe-box architectural designs. Indeed, LEED only offers a handful of points on the subject of creative or innovative climatic design, including passive concepts of heating, lighting and cooling.

Here's our opportunity to get back to the joke about engineers and architects. We must solve the riddle of how to integrate high-design ideals into mainstream requirements through a continuing conversation with the engineers at USGBC. Integrating high-design concepts and opportunities into the LEED process will only increase those value-added advantages already realized, making green design synonymous with beautiful architectural projects. ♦

Fred Andreas, AIA, LEED AP, is a member of AIA's COTE committee, the chair of the Advocacy COTE Subcommittee, COTE's liaison with the GAC as well as AIA Denver's representative for GAC. He's also a member of the Building Colorado Coalition Steering Committee involved in state legislative initiatives on green building and LEED.



S DESIGN/BUILD
P HVAC SYSTEMS
E POWER SYSTEMS
C SPECIAL SYSTEMS
I LIGHTING SYSTEMS
L PLUMBING SYSTEMS
T
Y

S LIFE SAFETY SYSTEMS
E FIRE ALARM SYSTEMS
R OWNER REPRESENTATION
V FIRE PROTECTION SYSTEMS
I
C CONSTRUCTION ADMINISTRATION
E
S

HADJI AND ASSOCIATES, INC.
MECHANICAL AND ELECTRICAL
CONSULTING ENGINEERS
SINCE 1966

1825 LAWRENCE STREET, SUITE 200, DENVER, CO 80202
PHONE 303 293-3800 FAX 303 293-3884
HADJI@HADJIENGR.COM
WWW.HADJIENGR.COM

LEED: DIGGING DEEPER

CONTINUED

Borrowing Our Planet

> BY PEGGY ANN KINSEY, AIA



"We have not inherited the earth from our ancestors; we are borrowing it from our grandchildren."

At my desk, I keep this quote posted next to the picture of my grandchildren. As I make decisions every day that impact the world I share with them, I find myself in a position of awesome responsibility and I don't take it lightly.

As an architect, I make significant — one way or another — contributions to our built environment. As a specialist in K-12 facilities, the impact of those contributions takes on an even different dimension. The future of our earth rests in the hands of our children who experience school buildings every day. These facilities become another learning tool. →

LEED and the Small Firm

> BY PETER J. EWERS, AIA
(SOON TO BE PETER J. EWERS, AIA, LEED AP)



Ewers Architecture is a small firm dedicated to environmental sustainability. I have been a part of the AIA Committee on the Environment for more than a decade. I recycled before it was fashionable. I have read books, been to conferences and dreamed about the perfect green project.

So why don't we have more projects that are actually sustainable? We know all the environmental systems and techniques. We can talk the talk with the best of them. Walking the talk, however, is a different story. After many years of pondering this, I now understand that walking the talk takes a client to walk beside you.

One of our recent clients, a multifamily developer, began its project by demanding sustainable materials, active solar hot water

THE WEIDT GROUP

ENERGY AND DAYLIGHTING DESIGN ASSISTANCE

Working with architects, engineers, building owners, utilities, and product manufacturers to design and validate high performance buildings since 1977.



WWW.TWGI.COM

MINNEAPOLIS

DENVER

BERKELEY

MONTPELIER

360° of service



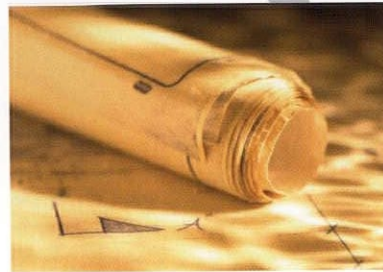
Project Document
Management



On-Site Facilities
Management

Reprographics

Creative Color Solutions



2006 Gold Sponsor
The Colorado Chapter of
The American Institute of Architects

Downtown
Lakewood
Tech Center

INDOX Services offers more than just reprographic services. We support your project through its entire life, from concept to closeout.

Our document management services take the worry out of organizing your project-related documents, while providing access to team members who need it. This allows you to do your job while we handle the details of document management and fulfillment.

INDOX
SERVICES

303.572.7905
www.indoxservices.com



*The leading contractor specializing in Excavation,
Demolition, Utilities and Environmental Remediation.*

730 West 62nd Ave
Denver, CO 80216
303-429-8893



www.fioreandsons.com

It isn't about jumping on the bandwagon or tacking on an element. Rather, it is changing the way you think and live.

— Peggy Ann Kinsey, AIA

> KINSEY CONTINUED FROM 44

What about other buildings? As the past chair of the AIA Denver Committee on the Environment, I spent the last 12 years watching the green movement grow, and I participated in nurturing that growth. The few faithful members of the committee understood the holistic nature of the movement and knew the key was education. As such, in 1994 the first edition of the Sustainable Design Resource Guide was published. Richard L. Crowther, FAIA, wrote this to summarize the book's forward:

"Every choice we make in design has an environmental consequence. A sustainable design perspective is essential to retain the vital renew-ability of our Planet."

The editors summarized their effort as follows: the guide was created to help the reader find resources and exercise appropriate options in sustainable design for the well-being of people and the

> EWERS CONTINUED FROM 44

and photovoltaics. That project has seen SIPs degraded to standard stud-frame construction and solar hot water and photovoltaics reduced to possible add-ons — if the buyer opts for the upgrade.

Another recent client lamented, "I now appreciate the true meaning of 'green' architecture — it represents the color of money that must be paid to incorporate these ideals."

Where does LEED fit into our business plan? I believe that LEED certification is one part of convincing our clients that we are the experts they can rely on to steer them through the maze of sustainable options. Once our client believes in us, that green path will be one step easier (not easy, just easier). That's why I am currently working on my LEED certification, and we are striving to have every design professional (all three of us) LEED certified by the end of the year. →

AIA
Affiliate Professional Member
Since 1988



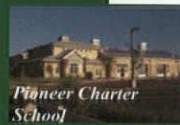
JEAN SEBBEN ASSOCIATES, LLC
COMMERCIAL INTERIOR DESIGN

Interior Design
Space Organization
Specification

104 S. Weber St. #100
Colorado Springs, CO
80903
p 719-635-7133

Building is a Tradition ...

"Green" Building is the Future



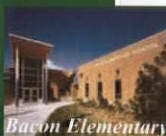
Pioneer Charter
School



Burr Oak Design
Center



Nederland
Community Center



Bacon Elementary

Our heritage has evolved from a discipline of construction excellence. Accomplishment takes time, perseverance and commitment. Alliance Construction Solutions continues to build on such core values, especially for the generations that follow, while adapting to industry changes and expectations.

Our goal is to continue to build on our foundation of dedication, reliability and commitment to ensure superior construction services to our clients, our industry and our community . . . today and into the future.



Alliance
CONSTRUCTION SOLUTIONS
Your Partner in Construction Services

Loveland
970.663.9700

Denver
303.813.0035

Cheyenne
307.433.1095

www.allianceconstruction.com

planet. The goal was that designers would make sustainable practice a part of their work. It would inform everything they did. That was the goal then — and it remains our goal today. Sustainability and environmental education are inseparable concepts. They are more a process than an end-product. They are woven through out our cultural and social values and beliefs.

The bottom line: being green is not a marketing tool! It isn't about jumping on the bandwagon or tacking on an element. Rather, it should change the way we practice our profession and the way we live our lives. ♦

Peggy Kinsey, AIA, of SLATERPAULL Architects, chaired the AIA Denver Committee on the Environment for eight years. She was also one of the original editors of the Sustainable Design Resource Guide, published 12 years ago and the first resource of its kind. She is currently a co-chair of the Heritage Committee, working on Greenbuild 2006 that will take place in Denver this fall.

Architects must also be educators. We must educate our clients on all aspects of architecture — the art, the realities, and yes, sustainability. If we can back up our lessons with hard facts (and an impressive array of letters after our name), then maybe our clients will start to listen. I do not believe that LEED is perfect, nor is it the answer to all sustainable issues, but LEED is one tool in our toolbox to get our clients on board, listen to us and treat us like the experts we are.

As a small firm it is often difficult to be taken seriously, especially by bureaucratic clients like school districts and governments. So we must exploit every opportunity to show our expertise and convince our clients of our knowledge and abilities. Becoming a LEED AP is one step in the right direction. ♦

Peter J. Ewers, AIA, of Ewers Architecture is a member of AIA Denver's Committee on the Environment, the U.S. Green Building Council, American Solar Energy Society, the Colorado Renewable Energy Society and the Congress for New Urbanism.

"I now appreciate the true meaning of 'green' architecture — it represents the color of money that must be paid to incorporate these ideals."

— Anonymous architectural client

Everdure Caltite Waterproof Concrete System

No membranes or coatings required

- Basements
- Tunnels
- Walls
- Roofs
- Exposed Decks
- Plaza locations

Reduce construction time and cost
10 Year Performance Warranty

For information contact:
Ken L. Dzioba, CSI, CDT
206-764-3119



Glacier Northwest
Rocky Mnt. Region

Email: kdzioba@glaciernw.com
www.glaciernw.com



ARCHITECTS' OFFICE GOES FOR GOLD



BOULDER ASSOCIATES CREATES AN INSPIRING WORK ENVIRONMENT, BRINGING SUSTAINABLE CONCEPTS TO LIFE

> PAGE 48

> PHOTOS BY ED LACASSE



ARCHITECT Boulder Associates Inc.
MECHANICAL, ELECTRICAL, PLUMBING ENGINEER The Boulder Engineering Co.
LIGHTING DESIGN David Nelson & Associates LLC
GENERAL CONTRACTOR Faurot Construction
PHOTOS Ed LaCasse

PRIMARY MATERIALS USED

- > Wall Framing: LSL, wheatboard and polycarbonate
- > Sound Insulation: Cotton batts
- > Countertops: Dakota burl
- > Demising Wall: Original salvaged brick
- > Ceilings: Salvaged Douglas fir (wood slat ceilings), aspen excelsior (infill), modular fabric (public drop ceilings) and salvaged acoustical tile (back-of-house drop ceilings)
- > Flooring: Recycled content carpet, linoleum, existing oak
- > Plumbing Fixtures: Waterless urinals, dual-flush toilets, hydro-powered electric-eye faucets
- > Window Treatment: PVC-free roller shades, reflective-backed at south windows
- > Light Shelves: Custom aluminum framing with polycarbonate infill
- > Systems Furniture: Greenguard certified task chairs, guest chairs and systems furniture with biodegradable tackboard fabric made from corn

TOP Reception. CENTER Gallery. BOTTOM Studio. OPPOSITE TOP Conference room. OPPOSITE CENTER Workstation. OPPOSITE BOTTOM Lobby.

IN OCTOBER 2005, BOULDER ASSOCIATES' PEARL STREET OFFICES

MADE HISTORY as the first project in the nation to achieve LEED- CI v2 certification, earning a Gold rating. The firm's commitment to responsible practices was a driving force behind the program for design, making possible an office environment that is resource efficient, healthy and supportive of the firm's culture.

After 22 years in a suburban location, the architecture/interior design firm moved its offices to the Pearl Street Pedestrian Mall in downtown Boulder, where three interconnected buildings offered remnants from the past 100 years as well as large open spaces created more recently. The designers wanted to protect and restore the historic value of the space while updating it in terms of material choices, daylighting, energy and water efficiency, and indoor air quality.

The result is a unique combination of old and new — an office that blends functional efficiency with a high degree of visual interest. Conference rooms and offices are enclosed by walls custom framed with laminated strand lumber and infilled with polycarbonate glazing and wheatboard panels. Exposed ductwork and galvanized light fixtures accentuate the clean, modern look while a century-old brick wall and original tin ceiling provide organizing features and glimpses of the structure's history.

In selecting new materials, the firm investigated its options thoroughly to select those that would have the least impact on the environment throughout their life cycle. This resulted in the specification of some products made from some unusual sources — from denim fibers and sunflower seeds to pickle barrels and wheat stalks. An impressive 39 percent of all materials are either post-industrial or post-consumer recycled items, 5 percent were grown in one growing season, and 40 percent were locally manufactured.

Other green and sustainable statistics include:

- > 43 percent water savings over the Energy Policy Act of 1992,
- > Lighting power density 15 percent below ASHRAE 90.1-2004,
- > 100 percent purchased wind power,
- > 92 percent Energy Star equipment and appliances.



A RECIPE FOR ORGANIC LIVING

SOLAR HOUSE TEAM DESIGNS SUSTAINABLE HOME THAT GIVES NEW MEANING TO THE TERM 'HEALTHY LIFESTYLE'



> BY JENNIFER SEWARD

"As architects we try really hard, but dumpsters still get filled up on the construction site. We have the beautiful picture at the end, but this doesn't show the damage done in the process, and this bothers us."

— Julee Herdt, Assoc. AIA, Associate Professor
CU's College of Architecture and Planning

What do you get when you combine plant fibers, corn, wheat and soy products, bamboo, flax oil and cornstarch with recycled and salvaged materials? While this sounds like the buildup to a great punch line, if you are the University of Colorado's winning 2005 Solar Decathlon team, you get the BioS(h)IP, a solar home that provides a no-petroleum alternative for housing.

"We combined bio-based materials with state-of-the-art renewable energy systems. Then put it on wheels and rolled it to Washington D.C. using biodiesel," explained the team's faculty adviser and architect Julee Herdt, Assoc. AIA, associate professor of CU's College of Architecture and Planning.

The first-place solar mobile home — driven from Boulder to D.C., fueled by waste oils and plants — sat on the National Mall for three weeks last fall during the Solar Decathlon competition sponsored by the U.S. Department of Energy. It was intended to give Americans a first-hand look at how to build without petroleum. →



© 2005 UNICO, INC.

UNICO FITS™

YOUR VISION

YOU SEE OPEN SPACES, CURVED WALLS, REMARKABLY TWISTED STAIRCASES, AND UNIQUE MATERIALS FOR YOUR CUSTOM HOME. YOUR ARCHITECT RELISHES IT, ESPECIALLY THE FACT THAT HE DIDN'T HAVE TO DESIGN AROUND THE HVAC SYSTEM BECAUSE YOU CHOSE UNICO. WE LIVE FOR YOUR VISION. IF YOU CAN PLAN IT, WE CAN HEAT AND COOL IT. BEAUTIFULLY.

BY THE WAY, HAVE YOU SPOTTED OUR OUTLETS IN THE PICTURE ABOVE YET?

CALL 800 527 0896
VISIT WWW.UNICOSYSTEM.COM

The Unico System®
Mini-Duct Central Heating & Air Conditioning





SCRAP & SALVAGE

"If you took the house and squeezed it like a sponge, not much petroleum would come out of it," Herdt said.

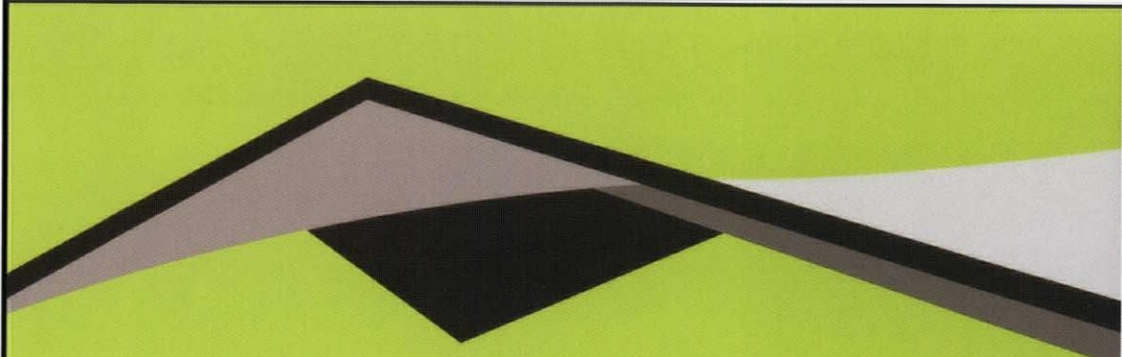
Instead, the BioS(h)IP is made of agricultural waste, paper waste and by-products from food crops that can be pressed into building materials. Salvaged aluminum was used for the super structure for the house and was combined with scrap aluminum beams and columns in addition to engineered lumber beams from a salvage materials yard.

Herdt is working in collaboration with CU and the U.S. Department of Agriculture to develop a patent on BioSIPs — a building product she's created from curbside waste paper and Kraft fibers (brown fibers in paper bags) and testing at CU's Smash Lab. The award-winning house was designed and built by a team of students from the architectural and engineering schools, testing BioSIPs in a real world scenario.

"With the BioS(h)IP, we could recycle a lot of the materials back into the bin and create a house," she said.


THE LEADER OF THE PACK

"CU's College of Architecture and Planning is developing a strong reputation as a leader in the field of environmental design," said Herdt. "We're designing, testing, and building with our green research and sustainable materials experiments. And we're moving our inventions from behind the university's walls and into the hands and minds of the profession and the public. The great thing about the 2005 Solar Decathlon is that it gave us the opportunity to



MILE HI MODERN
DENVER REAL ESTATE FOR MODERN LIVING

**DENVER'S ONLY
REAL ESTATE
TEAM DEDICATED
to MODERN
ARCHITECTURE**



**DISTINCTIVE
PROPERTIES
LTD**

M I L E H I M O D E R N . C O M : 3 0 3 . 3 1 6 . 2 1 6 1



Nothing Lasts Like An Acme Brick. We Guarantee It.



Latex paint:
5-year limited guarantee

Composition shingles:
20-year limited guarantee

Double-pane insulated windows:
20-year manufacturer's warranty

Oak panel door:
1-year manufacturer's warranty



When you buy a new home, you want it to last a lifetime. But when windows break, the roof springs a leak, and the paint peels, it is nice to know that one product, Acme Brick, will last a lifetime. Each Acme Brick is

made from fine earth clays, blended for color, and hard-fired in computer-controlled kilns at temperatures that can exceed 2,000 degrees.

The result is a brick that will outlast your mortgage. In fact, we guarantee it – for 100 years.



Since 1891, we've shown that Acme Brick is the best thing to have around your house and your family.

So, for lasting beauty that comes with a 100-year, fully transferable limited guarantee, choose Acme Brick.

Because, if you don't see the Acme name, you won't get Acme quality. Or the guarantee.



401 Prairie Hawk Drive • Castle Rock, CO 80104 • (303) 688-6951 • brick.com



GROWING OLD ISN'T EASY...

BUT AFTER 220 YEARS RIDER HUNT
STILL KNOWS HOW TO MAINTAIN THE
PERFECT FIGURE.

CONSTRUCTION COST ESTIMATING
BUDGET CONTROL
CHANGE ORDER ANALYSIS
OWNER REPRESENTATION

EST. 1785



Rider Hunt Levett & Bailey

Construction Consultants and Quantity Surveyors

DENVER, CO | 720.904.1480
www.riderhunt.com

QUALITY

DENVER'S REPROGRAPHIC LEADER

Ken's Reproductions LLLP. has been serving
the Denver Metro area's engineering
community for 44 years.

- ▲ HOST FOR OCÉ PLAN CENTER - DIGITAL PLAN ROOM
- ▲ DENVER'S LARGEST PRODUCTION CAPACITY UNDER ONE ROOF
- ▲ REPRODUCTION OF PRINTS & SPECS FROM BOTH HARD COPY & DIGITAL FILE
- ▲ PICK-UP AND DELIVERY
- ▲ SHIPPING VIA FEDEX
- ▲ FREE CONSULTATIONS
- ▲ FULL SERVICE REPROGRAPHICS FIRM

**KEN'S
REPRODUCTIONS, LLLP**

KEN'S DOWNTOWN
2220 Curtis Street
Denver, CO 80205
303.297.9191 Fax 303.297.8885

KEN'S SOUTH
7304 S. Alton Way 3H
Englewood, CO 80112
720.493.9904 Fax 720.493.9917

Visit us on the web: www.kensrepro.com



> SOLAR HOUSE CONTINUED FROM 52

achieve testing standards for our new BioSIP system. We've received certification and the building industry's thumbs-up to get this exciting new material into the marketplace."

Solar House adviser Mike Brandemuehl, a CU professor of civil, environmental and architectural science, said that the team's diversity helped its success. "It was a very collaborative process, with about 100 people," he said. "But a core group of 15-20 people — faculty and students, both undergrad and graduate — carried the project through from beginning to end."

Environmental design student and team member Mark Cruz helped coordinate the solar house's recent move from the CU Boulder campus to its permanent home in Prospect New Town.

"We're waiting for the design and development of the foundation system right now," Cruz said. "It will be integrated into a new two-story home design, with a basement and second level added to the linear mobile home."

The flagship model solar home will be placed prominently on a corner lot to "add another level to the town's great experiment," said Cruz. The house will eventually be put on the market as a single-family home within the Prospect community. ♦

Usually people snoop to see what's in the medicine cabinet.

Custom Interior Concrete Fabrication www.concreteRevolution.com
 1221 Pecos Street, Denver CO 80204 tel 303.893.4814

Architecture by Geoffrey Lester

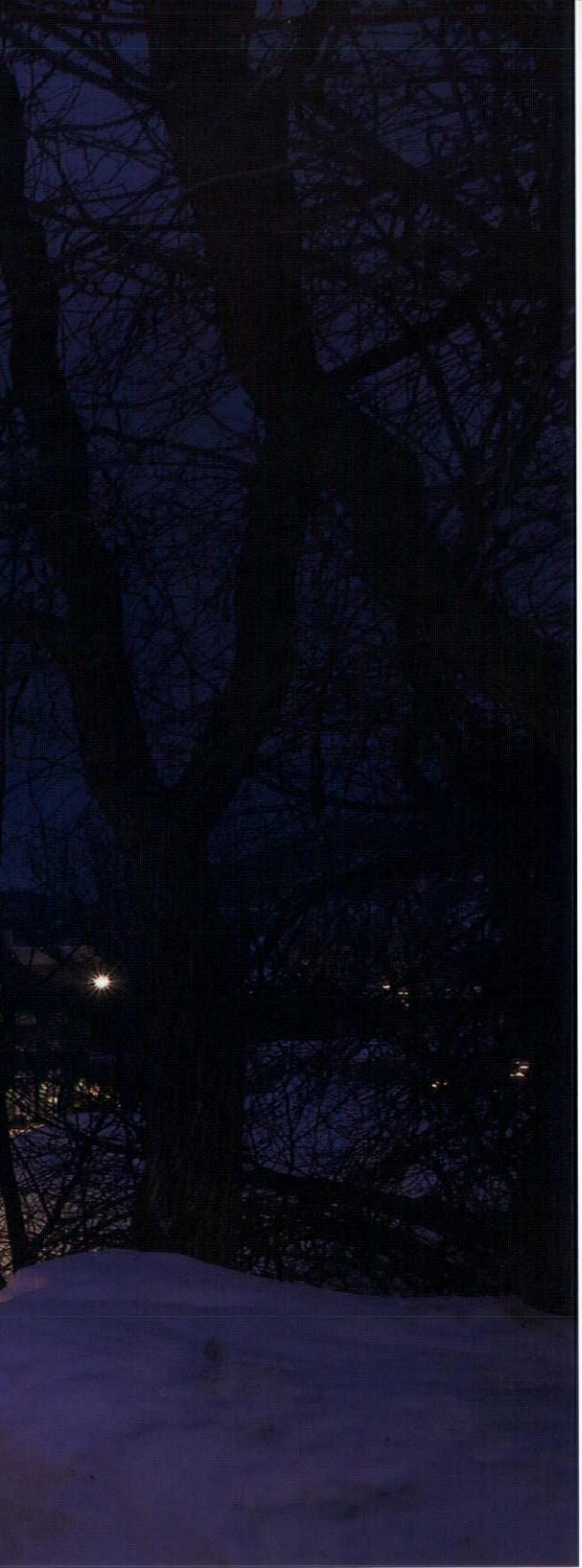


Altitude Adjustment

> PAGE 56

> BY LINDA HAYES

> PHOTOS BY MICHAEL BRANDS, TIMOTHY HURSLEY AND ROBERT SARDINSKY



ASPEN RECREATION CENTER PLAYS AN INTEGRAL ROLE IN THE COMMUNITY'S PURSUIT OF AN ACTIVE LIFESTYLE

Its glittery public persona aside, the heart and soul of

Aspen is a family-oriented community of about 6,000 year-round residents dedicated to pursuing an active lifestyle. To that end, Mother Nature contributes a spectacular setting of soaring peaks and verdant valleys — throughout which seemingly endless miles of trails and rivers wind — while the city of Aspen kicks in with a wide variety of recreational facilities, from skateboard parks to a public golf and tennis club.

So why the need for a new, state-of-the-art recreation center?

"Some of the key athletic facilities around town, such as the 25-year-old James E. Moore Pool, the Aspen Ice Garden and the Aspen Youth Center, had seen better days and were in need of upgrading," said Tim Hagman, AIA, principal of Hagman Architects in Basalt and a consulting design architect on the Aspen Recreation Center project. "The ARC provided the opportunity to incorporate these facilities and others into one highly functional, approachable space and bring them up to the level of Aspen's other offerings."

From the outset, as the architect-of-record, The Durrant Group Inc. of Denver led a large team of consultants and partnered with Aspen city officials and the local community on the concept and design of the center, which is located about two miles from downtown Aspen on a sloping, 18-acre municipal park along Maroon Creek. A network of integrated cross-country skiing/hiking trails and bridges connects it to Aspen High School, as well as access roads and the surrounding valley.



COMMUNITY CONNECTION

Built on three levels, the 81,800-sq-ft ARC is divided into three discrete volumes, each of which houses one of the three primary facilities — pool, ice rink and Youth Center. They are joined by a central core lobby with a circular stairway, up through which rises a 32-ft, three-dimensional climbing tower.

The building footprint is shaped to minimize impact to the site, and its low profile and gable roofs help it merge into the landscape. Exterior materials and finishes, including stacked stone masonry, rusty corrugated metal and sage-green baked enamel siding, anodized aluminum framed windows and doors, and metal roof panels, reinforce the historical connection.

“It was important to everyone involved that the architecture connect with the history of the former mining community,” said Bill Baker, AIA, Durrant’s principal-in-charge.

The ARC is approached via a concrete and steel footbridge that passes through a stand of gambol oaks leading to a 25-ft high gable entry. The reveal of the inside space is, as Hagman describes it, “a wow.”

“In the entry lobby, the natural feel of the climbing tower provides a strong contrast to the exposed steel frame

superstructure and the reinforced concrete block walls,” he said. “The stairway is a link to the main spaces and gives you an idea of the circulation path.”

On the main floor, one of the ARC’s three key facilities is the 16,600-sq-ft Aquatic Center, which offers both serious family fun and serious swimming. A recreation pool features a zero-depth entry, a variety of spray features, a meandering “lazy river” rimmed with faux river rock and a 150-ft slide. The 25-yd, 4-1/2-ft-deep, 84-degree competitive lap pool features six lanes and a one-meter diving board. Aquatics design engineer Vic Davies of Victoria B.C. touts the facility’s energy efficiency, which includes efficient boilers, pumps, motors, and fans, as well as a solar hot water system and micro-turbine. Plans are in the works for an outdoor pool area.

LOCAL SUCCESS STORY

On the lower level, the Lewis Ice Arena (named after a local philanthropist) boasts an 85-ft by 200-ft NHL regulation ice surface, complete with grandstand seating for 450 fans, as well as multiple locker and shower rooms equipped for full ADA accessibility.

The upper level is the new home of the Youth Center, a

“It was important to everyone involved that the architecture connect with the history of the former mining community.”

— Bill Baker, AIA
The Durrant Group Inc.

ASPEN RECREATION CENTER

LOCATION Aspen
CONSTRUCTION COST \$18 million
SCOPE 81,800 sq ft
COMPLETION April 2003
OWNER City of Aspen
ARCHITECTS The Durrant Group Inc., architect-of-record;
Hagman Architects, design architect
AQUATICS DESIGN ENGINEER Vic Davies Architect Ltd.
STRUCTURAL AND ELECTRICAL ENGINEER The Durrant Group Inc.
MECHANICAL ENGINEER Keen Engineering
CIVIL ENGINEER Sopris Engineering
LANDSCAPE ARCHITECT Dave Carpenter, DHM
GENERAL CONTRACTOR Shaw Construction

OTHER NOTABLE PROJECTS BY THE DURRANT GROUP INC.

- > Lotte World II, Busan, South Korea
- > Imiloa Astronomy Center of Hawaii, Hilo, Hawaii
- > Marana Municipal Complex, Marana, Ariz.
- > May Company stores throughout the United States,
currently being converted into Federated Department Stores
(including all Foley's stores in the Rocky Mountain Region)

OTHER NOTABLE PROJECTS BY HAGMAN ARCHITECTS

- > Snowmass Recreation Center, Snowmass
- > The Porches Development, Steamboat Springs
- > Aspen Mountain Gondola Building, Aspen
- > Riverpark Center, Basalt
- > 104 Midland, Basalt

private, nonprofit youth organization. It regularly hosts more than 17,000 local and visiting youths a year for foosball, bumper pool and air hockey in the game room, as well as drop-in crafts projects, daily clubs, including chess and science, and the Aspen Education Series. Additional facilities include a fully equipped cardio and fitness room, a babysitting room and locker/shower rooms.

Since its opening, the ARC has lived up to its role as an integral part of the Aspen community's recreational pursuits.

“It's a real success story,” said Tim Anderson, recreation director for the city of Aspen Parks & Recreation Department. “Not only does the design fit in with the lay of the land, but its free-flowing nature makes it extremely user-friendly for locals and visitors alike.”

So far, all of the financial goals for the ARC have been met. In addition to member and day-use fees, income is generated by occasionally renting the facility out to corporate groups for team-building events. The ARC received a Colorado West Chapter AIA Design Award in 2004.

PREVIOUS The exposed steel entrance structure, accessed by an elevated bridge, is accentuated at night by indirect lighting, dynamically drawing visitors into the space. Credit: Michael Brands **OPPOSITE** The building massing is broken down into small-scale forms to fit the context of the site. Low maintenance metal sidings differentiate the forms. Native landscaping provides a seamless connection to the site's natural surroundings. Credit: Timothy Hursley **BELOW TOP** A freestanding climbing tower is surrounded by a circular stair for viewing and access to the pool and ice rink below. The ice rink is visible through glazing on the left. Credit: Robert Sardinsky **BELOW BOTTOM** The indoor pool area includes a leisure pool with lazy river, six-lane lap pool, slide, hot tub and water toys. The overhead doors open to an outdoor courtyard in the summer months. Credit: Robert Sardinsky





KL&A, Inc.

Structural Engineers and Builders

LOCATIONS:

Golden, CO
303.384.9910

Loveland, CO
970.667.2426

Denver, CO
303.384.9910

Falmouth, MA
508.457.6794

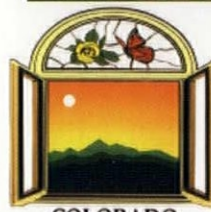
- Structural Engineering Consultants
- Steel Construction Management
- Structural Steel Design/Build
- Steel Detailing

www.klaa.com

KOLBE

■ WINDOWS & DOORS ■

Attention to detail is more than a slogan!



**COLORADO
SASH & DOOR, INC.**

Colorado Sash and Door, Inc.

116 W. Harvard, Unit #4

Fort Collins, CO 80525

(970) 226-1460

Fax: (970) 223-6543

1-800-775-7887



SHAW
CONSTRUCTION

300 Kalamath Street
Denver, CO 80223

Ph: 303-825-4740

Fx: 303-825-6403

760 Horizon Drive
Grand Junction, CO 81506

Ph: 970-242-9236

Fx: 970-241-5618

Building Satisfaction
Through Performance
Since 1962

www.shawconstruction.net

VERSATILE

Proud Builder of the University of Denver College of Law

From Conception To Completion

303.699.9000

www.saundersci.com



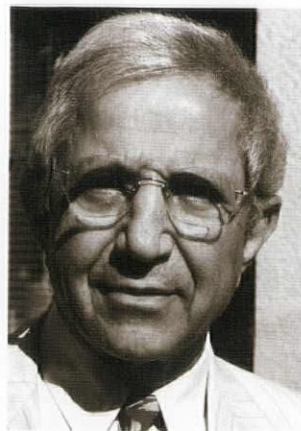
SAUNDERS

Building Confidence

COMMENTARY

THE STIGMATIZATION OF ARCHITECTURE

> MARVIN HATAMI, FAIA
GUEST COLUMNIST



Sustainable architecture, green architecture, iconic architecture, background architecture, signature building, New Urbanism.

Twenty years ago, these terms did not exist. It isn't as if these words were not part of the architectural vocabulary, but architecture was not classified as such.

Did Andrea Palladio, Bernini, Le Corbusier, Frank Lloyd Wright and Louis Sullivan, among many other architects, claim or brand their works as sustainable architecture? Parallel to sustainable architecture is green architecture, which presumably covers a gap between design and performance by focusing on recycling scarce resources to save costs and energy, using fewer raw materials and products that pose fewer threats to workers and the environment.

We are giving awards to projects that use sustainable materials, reduce energy consumption, preserve a site's natural resources, use natural lighting and so forth. But shouldn't these criteria be inherent in any work of architecture? Apparently, we have architects who ignore these essential criteria in their projects and then we give them awards for being good boys. Are the projects that receive design awards chosen regardless of their consideration for sustainability?

How do we brand Burnham Hoyt's Denver Public Library, the City and County building and the State Capitol? Do we call them sustainable architecture, iconic buildings or even perhaps background architecture to the Civic Center? I presume that background architecture implies buildings that line up our streets. Yet I would say, in reality, they are very much in the foreground of our urban areas and in contact with our daily activities.

How has new urbanism popped up? To the public, the term indicates a new discipline covering the letterhead of our practitioners. I welcome new urbanism; maybe the term will bring back the forgotten principle of old urbanism, and hopefully produce a more coherent and better urban environment, and perhaps even control sprawling neighborhoods.

For a moment, let's assume the city and county of Denver, under the banner of new urbanism, could pass a one-line ordinance: "No

open parking next to street." The form of the city would change drastically; our streets would line up with the buildings and the sidewalks next to them.

The point is that these nebulous terms are becoming front-runners of our practice. There are firms that offer sustainable or green architectural services. It seems we are going on the tangent by disassembling the making of architecture to find something new, and sustainability is just one part of the multitude of elements that make up a building.

The solution to this issue, as well as other technological matters, lies in our educational system. To prepare the new generation of architects, we need to include the criteria of sustainability, building performance, energy savings, etc. in their curriculum, along with the other technical subjects. The AIA Committee on Education has come up with 10 major objectives, none of which addresses these issues. The American Institute of Architects has no direct power over the schools of architecture; however, they could enforce the curriculum changes through the Accrediting Board, which, by the way, has architects as members.

I am beginning to think we have nothing better to do but find nebulous terms; recently AIA changed "Professional Interest Areas" to "Knowledge Community." When I first saw that, I asked myself what it meant. I thought it is not a bad idea to make our communities more knowledgeable about architecture, and architects will better understand the problem of our communities! Not true. The AIA has hired a group to conduct a survey under the new title, "Knowledge Community," to recommend to AIA how to better serve its members.

Instead, AIA could use its resources to prepare a glossary of materials and substances, their characteristics and their sustainability, as well as other practical and technical subjects available to practitioners and students. Let's not break up the true profession of architecture but rather try to re-establish the nobility it once had. ♦



Exterior Premium Pine Door 1863AP

Throw everything you know about wood out the window.



Wood Radius Casement Window



Exterior Premium Pine Door 1836AP



Wood Double-Hung Window



JELD-WEN® windows and doors made with Auralast™ wood will remain beautiful and worry-free for years. Unlike dip-treated wood, Auralast wood is protected to the core and guaranteed to resist decay and termite infestation for 20 years. To learn more about Auralast wood and all our reliable windows and doors, visit our showroom or go to www.jeld-wen.com.

RELIABILITY *for real life®*

JELD-WEN.
WINDOWS & DOORS

JELD-WEN® Windows & Doors
621 Corporate Circle, Suite A-C
Golden, CO 80401
(800) 380-3990



UNIVERSITY OF DENVER'S DESIGN NEW LAW BUILDING EARNS FIRST MATTERS LEED-NC GOLD RATING IN COLORADO

Placed strategically at the center of one of Denver's most respected university campuses stands a stately structure cloaked in quiet significance.

Better known by its soaring 48-ft oxidized copper spire and clock tower, the University of Denver's Frank H. Ricketson Jr. Law Building, which houses the Sturm College of Law, is the first and so far only academic legal institution in the United States to earn the U.S. Green Building Council's Leadership in Energy and Environmental Design's New Construction [LEED-NC] gold rating.

It is also the first and only building in Colorado with LEED-NC gold status.

Designed jointly by Denver's H+L Architecture; Mark Rodgers, AIA, AUA; and Jane Loefgren, AIA, of the University of Denver's Office of the University Architect; in association with Boston-based Shepley Bulfinch Richardson & Abbot, this project, completed in August 2003, has overcome extraordinary constraints to become one of the most progressive law school facilities in the country.

CONSTRAINTS & COMPLEXITIES

While most law buildings require a five-year programming phase, DU was faced with a condensed one-year programming and design timeline after the sudden sale of its Park Hill campus in late 2000. With little opportunity for advanced planning and millions of dollars to be raised, the university took a monumental risk. It moved forward immediately with the construction of a new \$63.5 million, 210,000-sq-ft law school.

"Although we were rightly concerned about things like design integration with the overall campus fabric, programmatic issues, overall maintenance considerations and energy usage, the toughest constraint was the schedule," said Patrick Johnson, AIA, principal architect of H+L Architecture. "We had 32 months to move the law school to a new campus from start to finish. But sometimes constraints can be your best friend."

The location of this blended brick building with limestone trim — two of the university's signature features — was another constraint. Designated as a "lively connecting point" for DU's graduate population, its centralized placement at the heart of the main University Park campus challenged the architects with a tight site, and ultimately drove the building's box-like footprint.

But the challenges did not end there. With one of the top environmental law programs in the country, Rodgers, supported by college faculty and leadership, was not only committed to pursuing LEED certification, he pledged to build one of the most innovative, inviting law school buildings in the nation.



“LEED was still in its pilot program when this project began, so very few firms understood the qualification process,” said Johnson. “When George “Rock” Pring, a law professor at the Sturm College of Law, brought the idea of certification to the project team, we quickly sought out the expertise of Greg Franta, FAIA, principal architect and LEED consultant at the Rocky Mountain Institute.”

CIVIL DISCOURSE

Today, this vibrant learning environment spans four stories, with the 38,000-sq-ft, three-story Westminster Law Library and technology center at the heart of the building. Adjacent to the library is a spacious two-story “Law Forum,” or conceptual town square, symbolizing the ideal of civil discourse. Much of the building opens up to this lofty, light-filled community space for students, faculty and staff.

The building also boasts 17 “smart-to-the-seat” classrooms, community lounge areas, intimate balcony pods, a 120-seat lecture hall, and a moot courtroom — clad in natural materials and a palette of environmentally-inspired colors. A soaring central light well with a skylight, or “light-trium,” houses the library’s glass-enclosed red spiral staircase, which anchors the Forum and floods the central commons and corridors with natural light.

“This project not only shows that good sustainable architecture can be accomplished in an aesthetic way,” said Johnson, “but that it can be done within great complexities and constraints of budget, schedule and competing constituencies.”

PREVIOUS Rich, sustainable brick, copper and limestone materials. ABOVE Seating alcove off main stairs. OPPOSITE Main entry and overall view of DU Law School.

OTHER NOTABLE PROJECTS BY H+L ARCHITECTURE

- > The Children’s Hospital at Fitzsimons, Aurora
- > University Corporation for Atmospheric Research – Foothills Laboratory, Boulder
- > University of Denver, Parking Structure and Residence Hall, Denver
- > Aims Community College, Beaty Hall and Health Sciences Building, Greeley
- > Montrose Memorial Hospital Cancer Center, Montrose



“Building green has proven good for the soul of a law school that prides itself on its environmental programs and consciousness — and good for the bottom line,” added Pring, one of the project’s original champions. “This building has become one of our best selling points for attracting new applicants.”

Some of the green features that helped the building meet 39 out of 50 LEED standards — resulting in a 40-percent energy-use and 39-percent water-use reduction — include recycled and high-efficiency natural building materials, light harvesting features, transom windows for transferring light into interior corridors, operable classroom and office windows, an advanced ventilation system with CO2 sensors, low-emitting carpeting and fabrics, waterless urinals, groundwater collection, recycling system for landscape irrigation and electric outlets for auto recharging.

“This project is a symbol of hope,” said Johnson. “Many architects aspire to make a difference. This building shows that good design can be accomplished within a huge number of constraints and without great compromise. Major objectives can be realized when everyone works together to make it happen — the Ricketson Law Building demonstrates that design matters.”

“This is the most collaborative project we’ve ever done,” said Rodgers. “This beautiful building reflects both our 112-year-old law college values and former Chancellor Daniel L. Ritchie’s vision of a campus that will last centuries, setting a new bar for legal education.”

THE FRANK H. RICKETSON JR. LAW BUILDING

LOCATION Denver
CONSTRUCTION COST \$46 million
SCOPE 210,000 sq ft

PURPOSE With the opportunity of a lifetime to relocate the 112-year-old College of Law to the main campus of the university for the first time, the university was able to both optimize a new facility for its unique program requirements and establish a building that speaks to the nature of law and justice. Raising the bar and setting new expectations for legal education, the building was designed to reinforce the college’s commitment to state-of-the-art instruction, environmental consciousness and best practices.

COMPLETION August 2003

OWNER University of Denver

ARCHITECT The Office of the University Architect – Mark Rodgers, AIA, AUA; and Jane Loeffgren, AIA; in collaboration with H+L Architecture, architect-of-record

ARCHITECTURAL CONSULTANT Shepley Bulfinch Richardson Abbott

CIVIL ENGINEERING Matrix Design

STRUCTURAL ENGINEERING Bierbach Consulting Engineers

MECHANICAL ENGINEERING Cator Ruma & Associates

ELECTRICAL ENGINEERING Gordon, Gumeson & Associates

SITE PLANNING & LANDSCAPE 5-Design

ENVIRONMENTAL CONSULTANT Ensar Group Inc.

COMMISSIONING EEI

INTERIOR DESIGN & FURNITURE Gallun+Snow

GENERAL CONTRACTOR/CONSTRUCTION MANGER Saunders Construction

COMMERCE CITY CIVIC CENTER

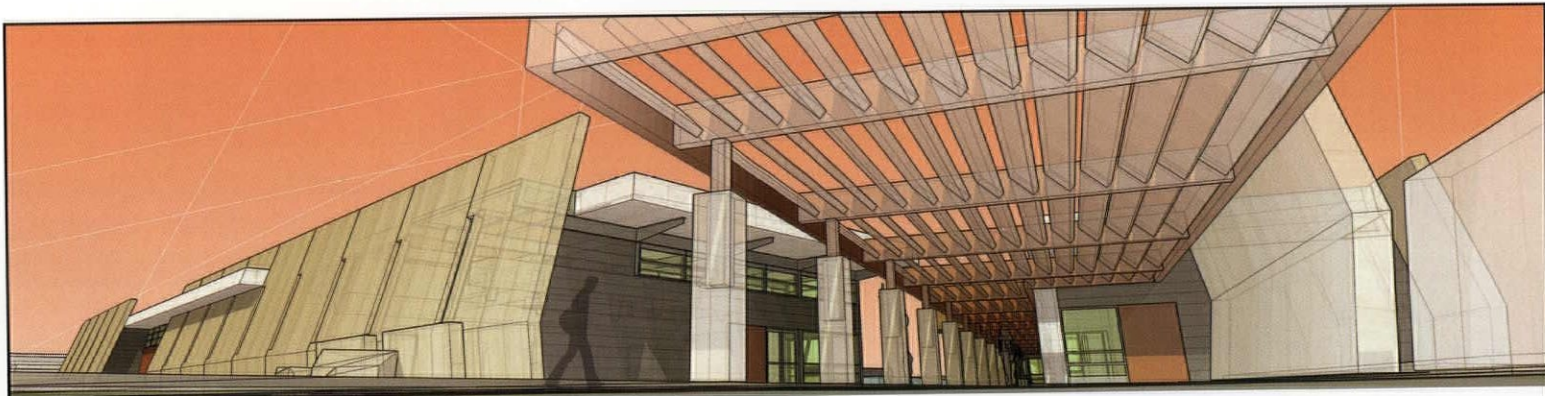
RNL DESIGN

LOCATION Prairie Gateway Project, Commerce City
OWNER City of Commerce City
SCOPE 90,000 sq ft
COST \$30 million
COMPLETION February 2007



Commerce City's Civic and Justice Center will target, as a minimum, LEED-silver certification. The project is equally influenced by the prairie and the urban environment. The front side of the building will face new development, including Commerce City's new Prairie Gateway project and the new Colorado Rapids soccer stadium. The northwest side of the building faces a new wildlife refuge on the site of the former Rocky Mountain Arsenal. The building will be long and low and uses a combination of materials that represents this weaving of nature and new urbanism, including a unique manufactured stone and metal wall panels. The cool roof will reduce the building's cooling load and heat island effect. There are also several roof terraces and garden roofs available for the occupants to enjoy.

Daylighting is a significant component of the glazing design, which features sun shades, interior louvers and selective glazing based on orientation and the function as a daylighting or view window. Further energy efficiency is achieved by adding occupancy and daylighting sensors, energy-efficient fixtures and dimmable ballasts. Water conservation is key to the design, with the use of waterless urinals and ultra low-flow plumbing fixtures. The building will utilize access floor and underfloor air distribution to enhance energy efficiency, occupant comfort and indoor air quality. ♦



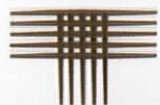
"While SketchUp is great visualization software, it's also an integral part of our design process. Time and again, SketchUp has proven to be a highly valued tool that has expanded our ability to communicate with the client effectively in real time."

— Kevin O'Brien; Design Director, HMC Architects

SketchUp
from Google®

Visit www.sketchup.com/aiaco to download a free trial of SketchUp Pro 5.

© 2006 Google Inc. All rights reserved. SketchUp and the Google logo are trademarks of Google Inc. Model courtesy of HMC Architects, Project: College of the Desert Public Safety Academy, Rendering: James Krueger & Chris Grant.



CTLITHOMPSON

AN INDUSTRY LEADER IN GEOTECHNICAL,
MATERIALS, STRUCTURAL AND
ENVIRONMENTAL ENGINEERING AND TESTING.

Denver
(303) 825-0777

Colorado Springs
(719) 528-8300

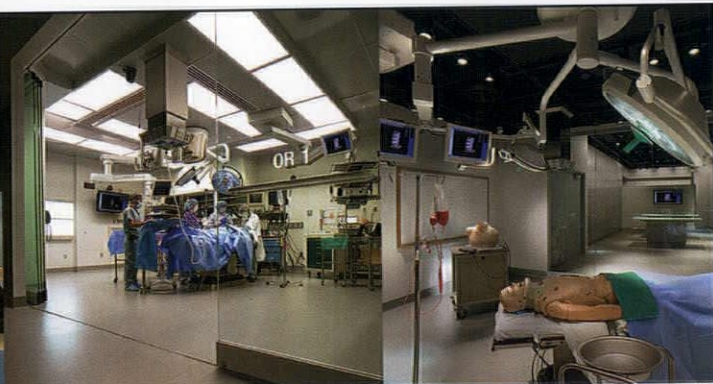
Glenwood Springs
(970) 945-2809

Fort Collins
(970) 206-9455

Pueblo
(719) 595-1287

Celebrating
35 years
of
trusted
solutions

www.ctlt.com



MAYLONE.com
Photography

www.maylone.com

NEDERLAND LIVE/WORK STUDIO HT

LOCATION Nederland
OWNER Mark Maricle
SCOPE 3,000 sq ft
COST \$500,000
COMPLETION April 2007

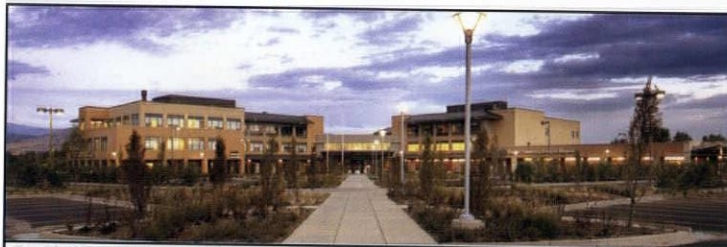


With allusions to the historic and iconic mining structures in the area, this live/work project seeks to gracefully invigorate a downtown residential area of Nederland. Rusted Cor-Ten steel panels clad portions of the exterior, and wood timbers appear in railings, trellises and roof-rafter lookouts. A pair of insulated garage doors allow the 1,000-sq-ft commercial studio space to open to the outdoors during the summer months, and a wood trellis guides the studio's visitors to the residential entrance that ascends to the upper floors.

Bringing together contemporary green building techniques with historic material references, the building makes use of several sustainable materials and practices. Cempo, an insulated, 4-ft-by-4-ft concrete block made of recycled polystyrene and cement slurry, is the primary wall structure, with an R-value of 44.

Radiused glued-laminated beams support the R-40 structural insulated panel roof. Solar panels rest on an optimally sloped secondary roof at the south end of the building to heat both domestic hot water and the radiant in-floor heating system. South-facing glazing, in concert with roof and deck overhangs, also optimizes passive solar heating.

As the first mixed-use building in town, the project received substantial attention during the review process. The project is now considered to be a model for future redevelopment of this Nederland neighborhood that sits at the edge of the commercial district.



Boulder Community Hospital

Oz Architecture & Boulder Associates

Urban to Resort. Structural Engineering.



Grand Aspen Lodge

O'Bryan Partnership



Monroe & Newell
Engineers, Inc.
Structural Engineers
Vail • Denver • Frisco

DENVER
1701 Wynkoop St., Suite 200, Denver, CO 80202
(303) 623-4927 • denver@monroe-newell.com

VAIL
70 Benchmark Rd., Ste 204/PO Box 1597- Avon, CO 81620
(970) 949-7768 • avon@monroe-newell.com

FRISCO
619 Main Street, Suite #7/PO Box 295 • Frisco, CO 80443
(970) 668-3776 • frisco@monroe-newell.com

www.monroe-newell.com



Protecting Your Future Since 1905

You worry about professional and personal loss.

We have experts to help you anticipate loss.

We can create risk management and insurance solutions to satisfy your individual needs.

And we are an Assurex Global™ Partner, combining the most experienced professionals in the Rocky Mountain Region with the best insurance products and services on six continents.

You worry about who to trust.

Our founders built our business on a culture of honesty and strong values. You will find this culture still flourishes in our company.

We have the integrity, stability, experience and professional relationships you have been looking for.

So...

What are you worried about?

Van Gilder is just a phone call away.

TOLL FREE 1-800-873-8500

WWW.VGIC.COM

COLORADO KANSAS TEXAS UTAH



BUSINESS INSURANCE



PERSONAL INSURANCE



EMPLOYEE BENEFITS



RISK SERVICES



AVIATION INSURANCE





BUILDING STRONG PARTNERSHIPS

If your project calls for state-of-the-art general contracting, construction management, or design-build expertise, Torix General Contractors is the ideal choice. Leading the industry in construction services, Torix is building strong partnerships on every project. Our approach is simple, one team, one goal, one outcome.

Contact: Marvin J. Maples, AIA, Commercial Program Manager, to find out more.



5045 LIST DRIVE
COLORADO SPRINGS CO 80919
P. 719 | 596.8114
F. 719 | 596.5969
W. TORIXGC.COM



COMMERCIAL
DIVISION

PELLA COMMERCIAL DIVISION WOULD LIKE TO OFFER
ARCHITECTS SOME FOOD FOR THOUGHT. AND LUNCH.



Pella Commercial is making it easier than ever for architects to receive the continuing education they need to maintain their AIA membership, CSI certification and/or architectural license. As an AIA/CES Registered Provider Charter Member since 1995, Pella Commercial is committed to developing quality learning activities in accordance with AIA/CES and Health/Safety/Welfare (HSW) criteria.

Programs will be presented by Pella Commercial representatives and cover a broad range of fenestration topics. Pella's programs are typically one hour in length, so architects receive one Learning Unit (LU) and one hour of HSW.

Pella Commercial helps make getting the training you need as easy as possible – you can even do it over lunch. Contact us today to set up your educational box-lunch program. And feed more than just your mind.

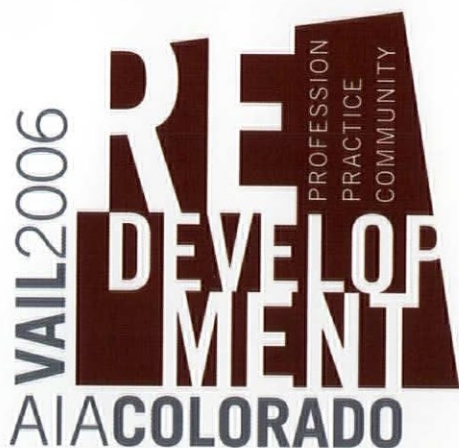
Pella Windows and Doors, Inc.
14175 E. 42nd Ave. • Denver, CO 80239
303-371-3750
fax: 303-371-4268
www.pella.com



> LOOKING AHEAD

2006 DESIGN CONFERENCE The 2006 AIA Colorado Design Conference — “Redevelopment: Profession, Practice, Community” — and the first annual Practice Management Symposium will be held at the Vail Cascade Resort and Spa **NOVEMBER 2 - 4**. This year’s conference will engage attendees as the theme explores a variety of redevelopment topics, including those focused on natural surroundings, communities, architectural practice and the architecture profession. Speakers include: Ron Altoon, FAIA; Antoine Predock, FAIA; David Miller, Miller Hull Partnership and Raymond Lucchesi, AIA.

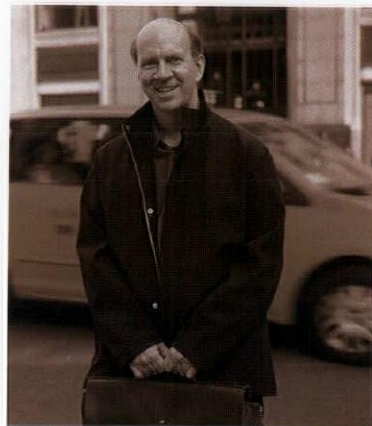
The AIA Colorado Practice Management Symposium will consist of a full day of one- to two-hour “best practices” sessions that are certified and approved for learning units and focus on education, leadership and increasing the general effectiveness of the professional practice. Sessions include topics such as: Innovative Design Presentations, Leadership Training, and Successful Business Development Practices.



AIA COLORADO DESIGN AWARDS The AIA Colorado Design Awards Gala will be held on **NOVEMBER 4** at the Vail Cascade Resort and Spa as the final evening celebration of the Design Conference. This black-tie-optional event is always a conference highlight. AIA Colorado Design and Honor Awards will be bestowed throughout the evening and include Architect of the Year, 25-Year Award, Firm of the Year, Contribution to the Built Environment, Leadership Award and the Innovative Practice Award.

AIA DENVER DESIGN AWARDS The AIA Denver Design Awards Gala will be held on **SEPTEMBER 8** at the Belmar Events Center. Join the honorable Denver Mayor Hickenlooper and AIA Denver members as they recognize and celebrate the contribution AIA members make to our communities through quality urban, interior and sustainable design, promoting the creation of a better built environment.

DESIGN-BUILD CONFERENCE AIA Denver and the Design-Build Institute of America, Rocky Mountain Chapter invite you to the Annual Design Build Conference — “Process and Performance: The Nuts and Bolts of Design-Build” on **SEPTEMBER 15** at the Inverness Hotel and Conference Center. Join us for a day filled with stimulating sessions sure to engage members on the many collaborative levels of design-build.



Robert Ivy, FAIA
Editor-in-Chief
Architectural Record

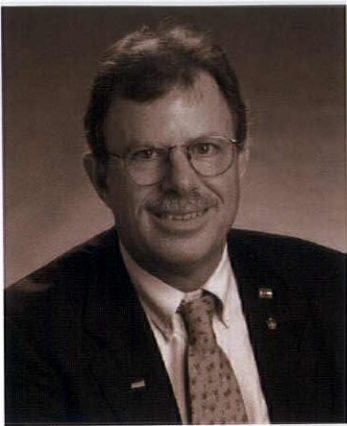
AIA COLORADO NORTH HOSTS ROBERT IVY, FAIA. AIA Colorado North welcomes Robert Ivy, FAIA, editor-in-chief of *Architectural Record*, for his **OCTOBER 5** presentation, “Movement of Architecture: Transit & the Development of Cities.”

AIA COLORADO NORTH DESIGN AWARDS The Annual AIA Colorado North Awards Gala will be held at The Stanley Hotel in Estes Park on **OCTOBER 6** in the MacGregor Ballroom. Come for an evening of dinner, dancing and the celebration of architecture.

AIA COLORADO SOUTH PRESENTS ITS AIA 150 INITIATIVE “GREAT STREETS/GREAT SKYLINES” AIA Colorado South Chapter members, working with residents and allied professionals, are developing a 3D-graphic model of downtown Colorado Springs. The model will be made available through a Web page to the public, developers, design entities and city agencies. It can be used as the basis for future planning, zoning and design studies for future development.

The “Great Streets/Great Skyline” scenarios generated will define a form-based code process for use by the Colorado Springs City Planning Department in its efforts to revise the downtown zoning code. AIA Colorado South encourages AIA members to get involved in upcoming charrettes to help influence the future development of downtown Colorado Springs.

> LEGISLATIVE AGENDA



> BY KIN DUBOIS, AIA
AIA COLORADO PRESIDENT-ELECT

ARCHITECTS AND ADVOCACY: ANTICIPATING THE FLOOD

The anniversary of the flooding of New Orleans has put me in mind of an extended metaphor — apologies in advance.

It is easy for our profession to see government advocacy as a defensive matter, of adding sandbags to the levee when the waters start to rise. The problem with this strategy is that it is almost always too late. Threats to the profession are always out there, and whether they arise from related trades, other professions, the regulatory system, or from sources we cannot anticipate, our work as the American Institute of Architects must be done long in advance of when legislation is actually drafted and introduced.

Sandbags — those last-minute “minuteman” telephone and email efforts and impromptu meetings with legislators — are simply not enough.

We can also be lulled by the cycle of the legislative world, the knowledge that hurricane season is always a few months out. The regulatory Sunset process comes up only every eight to 10 years. Elections are every two years for legislators, four for the governor. Yet to be effective, we must address the foundations of our “levee” system with the same intensity every year. Working with the key legislators that we identify as receptive, effective and well placed in the leadership or committee structure is an ongoing matter of building relationships.

The added benefits are that we’ve been able to make friends with some great people, and the nonpartisan nature of most of our issues allows us to develop relationships on both sides of the aisle. Best of all, by bouncing ideas off our state representatives and senators, we can also benefit from some useful insight and advice that we simply wouldn’t have otherwise.

Does this sound like work? Of course, but we are more effective when the load is shared. It’s one thing for the AIA Colorado president to speak with a legislator about an important issue. It is even more effective when an architect who is a constituent of that legislator’s district takes part.

Advocacy is not only defensive. By working in the public arena, architects can effect positive change in many areas: sustainability, growth, transportation and many more. By shoring up the foundations of the levees, we can not only keep the flood at bay but also, just as important, architects can actually take a hand in directing the tide. ♦

BOULDER
ASSOCIATES

ARCHITECTS

Always Seeking
Talented Designers

Boulder | Sacramento
jobs@boulderassociates.com



> PRESIDENT'S LETTER

SAVING THE WORLD

Architects hold the key to ensuring that sustainability is more than a fad to be discarded out of boredom

> BY CHERI GEROU, AIA
2006 AIA COLORADO PRESIDENT



"Sustainability is about the relationship between the two most complex systems on earth — human and living. The interrelationship between these two systems marks every person's existence and underlines the rise and fall of every civilization. While the word sustainability is relatively new, every culture has confronted this relationship for better or ill. Historically, no civilization has reversed its tracks with respect to the environment, but rather has declined and disappeared because it forfeited its own habitat. For the first time in history, a civilization — its people, companies and governments — is trying to arrest this slide and understand how to live on earth. This is a watershed in human existence."

— Paul Hawken

If you have never heard Paul Hawken speak on sustainability or read any of his published works, I highly recommend that you do. I first heard him speak at an AIA National convention in the late '90s, and I must say, he left his mark. However, as with any advocate for sustainability, I think we owe ourselves, and our planet, the time to truly think through the path to a more sustainable world. Our culture is well known for fads — not just in our lifetime but also throughout history. This is one cause we can't afford to indulge for a while and discard out of boredom.

Some of us remember the first Earth Day celebrated in 1970. Who can ever forget the "Save the Earth" logo — it was quite a celebration!

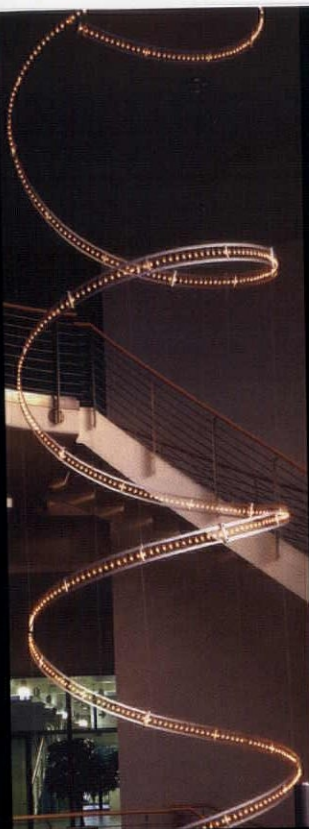
For the next few years it continued, then it seemed to lose its momentum in the 1980s. That's not to say we did not accomplish much — through the cleanups of our waters and landscapes — the world was a better place. It also changed habits; my generation lived our younger years well accustomed to watching people

discard trash out their car windows, in parks or along sidewalks — and that is no longer tolerated.

As architects, we can significantly impact the sustainability movement in the world. Our profession specifies a majority of the goods produced in the world — this gives us a great opportunity and a great responsibility. We all applaud the advent of sustainability systems for the built environment. However, the process by which we move toward a more sustainable world will only succeed if it is balanced to the economies of business. Whatever the method employed, we need a consistent, dogged determination.

As for me, I believe we will do the impossible, or at least the improbable. I believe future generations will live cleaner, more eco-friendly lives. I also believe that our profession will be remembered as a catalyst for that change. It is common to hear architects complain that they are losing their standing in the construction industry and society. Well, here's our chance, this is it! We just might save the world.





BRUCK - FLIGHT

A UNIQUE SHOWROOM SPECIALIZING
IN LIGHTING FROM AROUND THE
WORLD SHOWCASED WITH FINE
CONTEMPORARY FURNITURE IMPORTED
FROM ITALY. LIGHTING DESIGN
SERVICES AVAILABLE TO THE TRADE.



BRUCK - APOLLOS

The Lighting Studio

BRUCK - LEDRA 12C

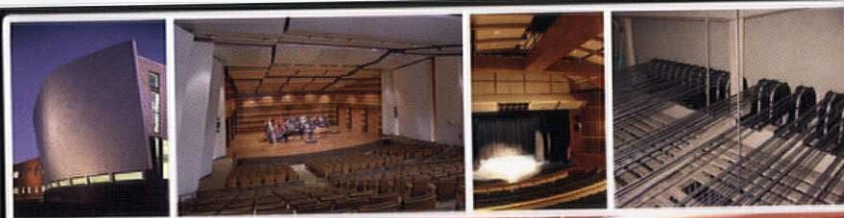


1024 CHEROKEE STREET
DENVER, COLORADO 80204
303.595.0900

414 NORTH MILL STREET
ASPEN, COLORADO 81611
970.925.5004

www.thelightingstudio.com

BRUCK - LEDRA



D. L. ADAMS ASSOCIATES, INC.

Consultants in Acoustics and Performing Arts Technologies
1701 Boulder Street Denver, CO 80211 303.455.1900
Contact us: moreinfo@dlaa.com

♦ ♦ ♦
Architectural Acoustics

Mechanical Noise and Vibration Control

Audio-Visual Presentation Systems

Sound Isolation

Environmental Noise Control

Theatre Planning

Stage Rigging, Lighting and Drapery Systems
♦ ♦ ♦



YOU MEAN NOW?

Architects must step up before it's too late

> BY JOHN D. ANDERSON, FAIA
ANDERSON MASON DALE ARCHITECTS
2001 AIA NATIONAL PRESIDENT

The debate is over. There is now a commonly held belief, based on solid science,

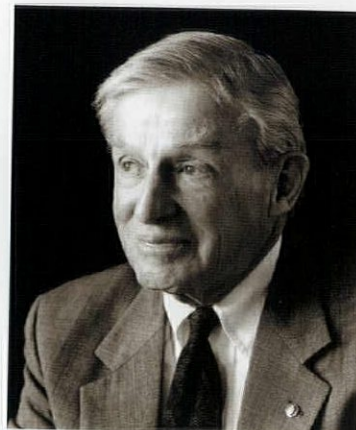
that global warming is primarily caused by man-made behavior, largely our combustion of fossil fuels. Much of the current credit goes to Al Gore's book and documentary, *An Inconvenient Truth*. And locally, we architects owe a thanks to two of our colleagues, David Tryba, FAIA, and Brit Probst, AIA, for a recent and free showing of Gore's film.

Two telling anecdotes come to mind. First, President Bush's surprising statement that the U.S. must free itself from petroleum dependency; and second, the news that some vintners in the Napa and Sonoma valleys are buying land in Oregon and Washington because global warming is making the conditions in California too difficult to continue growing premium grapes.

But why the major concern now? The "energy crisis" began in 1973 with the Arab oil embargo. The AIA acted responsibly by establishing an energy committee to prepare training materials and conduct workshops about how to design energy-efficient buildings.

The principles we learned then have served us well. In the mid-'70s, the Solar Energy Research Institute (now NREL) was founded here in Colorado and has functioned effectively, albeit on a shoestring.

Then in 1981, a new administration in Washington virtually shut down government support for alternative-energy research and applications. In 1983, the U.S. DOE sent more than 100 delegates (but only one architect) to the triennial World Energy Congress in New Delhi. As that architect, I presented a paper on solar energy development in the U.S.



It was well received, but the rest of the U.S. delegation apparently consisted largely of coal salesmen. The other nations reported sincerely on their efforts to save energy and explore fossil-fuel alternatives. I was, at best, embarrassed for the U.S.

TAKING ACTION

In the 20th Century, most developing nations made significant progress toward alternatives. For example, wind produces about half of Denmark's power needs, and Germany is striving to produce 50 percent of its energy needs from renewables by 2050.

Today, the landscape has dramatically changed, with India's rise as a major economic player, a voracious, energy-consuming China, escalating Middle East turmoil, and the inconvenient truth that man-made global warming threatens even bigger environmental mischief.

So why must we, as architects, be uniquely concerned about this state of affairs? Because the way we have practiced has helped create these problems. About half of today's energy usage goes to build, operate, heat, cool, light and power the planet's built environment, and 25 percent of that is consumed in the U.S. Because we know how to attack these problems, we must act now, before we become only spectators.

We must understand the meaningful changes suggested in Gore's book; then we must lead their implementation. Can we, as professionals, provide the bold leadership to prevent a true catastrophe? Our answer must be both *yes* and *now*.



CAPCO SHOWROOMS

DENVER

BOULDER

COLORADO SPRINGS

FORT COLLINS

AVON/VAIL

BASALT/ASPEN

GRAND JUNCTION

SILVERTHORNE

LAS VEGAS

INTERIOR SOLUTIONS

AT THE COLLECTION/

DENVER DESIGN DISTRICT



Tile & Stone

For the best results,

CAPCO recommends the use of
professional design and installation.

PIETRA DI FIANDRA
by Sichenia Gruppo Ceramiche, Italia



It's time for a good heart to hearth.

Light a fire under your home's decor. Engineered for use on nearly any surface, and designed for beauty and warmth in any room, this porcelain stoneware from Sichenia of Italia is a dynamic choice that will change your lifestyle. New for 2006, yet timelessly extravagant — and available at your local CAPCO showroom.

1-800-727-2272 www.capcotile.com

PRECAST CONCRETE - EVIDENCE OF SUPERIOR DESIGN



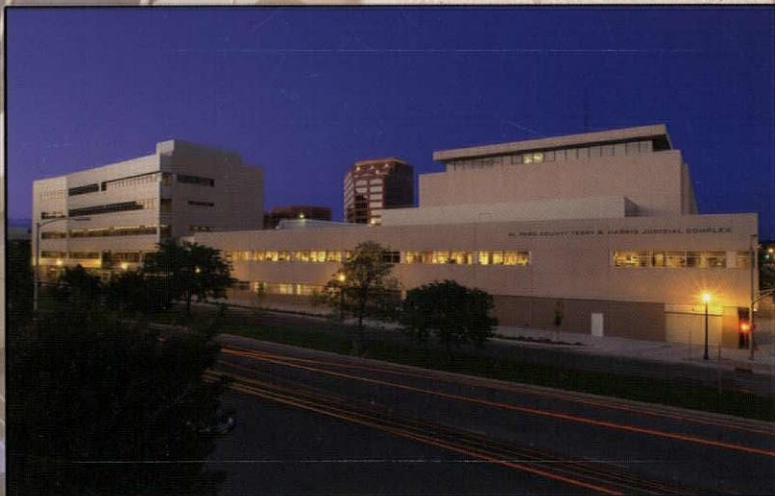
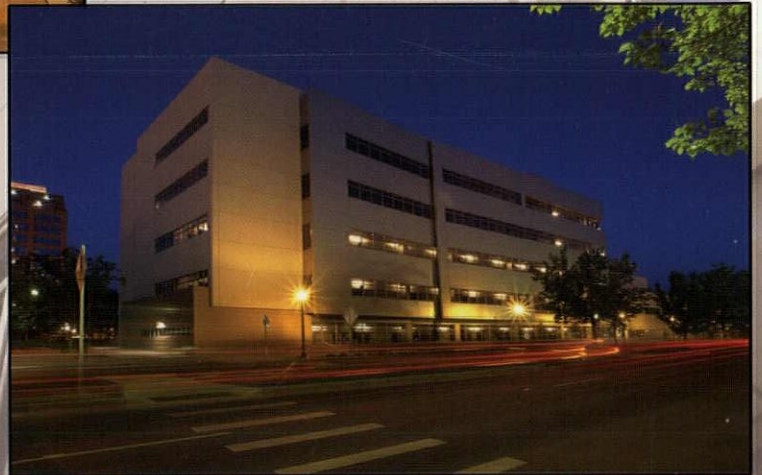
*El Paso County
Terry R. Harris Judicial Complex
Colorado Springs, Colorado*

Owner: El Paso County

Architect: DLR Group / Anderson Mason Dale Architects

Engineer: SA Miro, Inc.

Contractor: GE Johnson Construction Company



STRESSCON

ARCHITECTURAL AND STRUCTURAL PRECAST CONCRETE

An EnCon Co.

3210 ASTROZON BLVD.

TEL: 719-390-5041

WWW.STRESSCON.COM

COLORADO SPRINGS, CO 80910

FAX: 719-390-5564

METRO: 303-623-1323

EMAIL: SALES@STRESSCON.COM